A.I.D. Project Impact Evaluation Report No. 19

U.S. Aid to Education in Nepal: A 20-Year Beginning

May 1981

Agency for International Development

PN-AAJ-168

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U.S. AID TO EDUCATION IN NEPAL: A 20-YEAR BEGINNING

PROJECT IMPACT EVALUATION NO. 19

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May, 1981

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Finally, our thanks go to Dr. Vivian Green, a local consultant who, with assistance from Karen Trace, did a heroic job of tabulating and analyzing over 120 questionnaires in a week's time, an important contribution to the successful completion of this report.

EXECUTIVE SUMMARY

This evaluation seeks to measure the impacts of U.S. aid to education in Nepal over a 20-year period, from the beginning in 1951 of Nepal's first efforts to modernize the country and establish a national school system. During this period A.I.D. was the only major donor in education and contributed, through a series of projects and through substantial amounts of PL 480-generated excess Indian rupees, a significant portion of the financial resources as well as the training and technical assistance that went into creating and expanding Nepal's primary, secondary, and vocational education system. Consequently, successes and failures to date can be fairly closely related to A.I.D.'s assistance, though Indian influence is also apparent in Nepal's education policies.

On balance the impact of A.I.D. support has been highly positive, though results are mixed. A.I.D. assistance was crucial in enabling the Government of Nepal to carry out a massive and rapid quantitative expansion of the number of schools constructed and equipped, students enrolled, and teachers trained. In 1951 there were only 321 primary schools enrolling less than one percent of eligible children; by 1975 there were 8,708 schools enrolling 59 percent of the children. At the secondary school level, the number of schools increased from 11 in 1951 to 2,809 in 1975, and the percentage of children enrolled from .15% to 12%. In the early 1950s there were very few trained teachers and no teacher training facilities; by 1975 the Institute of Education had 13 campuses and had trained over 7,000 primary and 3,000 secondary school teachers. By 1975 a totally Nepali curriculum had been developed and an unusually effective textbook production and distribution system was functioning. The literacy rate was up from 2 percent in 1951 to 17 percent in 1975 and will show a much more rapid rate of increase in coming years given the greatly increased enrollment rate.

Despite this impressive progress, severe problems still beset education in Nepal. The primary system is highly inefficient, with 50 percent of enrolled students dropping out in the first three years before achieving functional literacy. The rapid expansion of the system has outstripped Nepal's capacity to train teachers, and the percentage of unqualified teachers is increasing. The level of learning is very low, especially in math and writing. Vocational training has been a failure.

The Ministry of Education recognizes and is addressing these and other problems. Despite the withdrawal of significant U.S. support, which for the most part has not been replaced from other sources, the rapid expansion of the education budget and the school system have continued. A cadre of educators, over 300 of whom were trained in the U.S., have taken the reins of educational policy into their own hands and show increasing capacity to diagnose problems and design remedies. Although Nepal would certainly benefit from continued outside assistance, the basic human and institutional resource capabilities have been created upon which to build.

A variety of important impacts are attributable at least in part to these educational gains. Studies have linked increased agricultural productivity in Nepal to the level of education. The World Fertility Survey reported in 1977 that literate Nepali women married for less than five years had a 20 percent lower fertility rate than those women who were illiterate. Health practices and knowledge are still very poor. Hygiene is a part of the primary school curriculum and teachers often report improved sanitation behavior as evidence that education is benefiting their students. Surveys conducted in several parts of the country, though methodologically imperfect and providing a very limited sampling, do indicate a relationship between the level of education and various attitudinal and behavioral characteristics conducive to development, such as receptivity to new ideas, willingness to take risks, higher aspirations rather than static expectations for the future, feelings of control over one's destiny rather than fatalism, and awareness of and participation in a broader world than one's immediate family and village. The impact of education on women has clearly been beneficial, though there remains room for much improvement. The percentage of female students in primary school has increased from less than one percent in 1951 to over 17 percent in 1975, and there is evidence of growing acceptance of the value of educating girls, especially in urban areas. The impact of education on equality of opportunity generally has been profound, despite remaining inequities based on geographic location and income. The educational gains are broadening participation in the political process and fueling demands for social, economic and political change to further reduce existing inequities.

Four principal lessons and policy conclusions emerge from this evaluation. First, A.I.D.'s assistance to education in Nepal demonstrates the significant impact that can be achieved, given a sufficient level and consistency of support over a sufficient period of time, and given the ability to finance substantial local as well as U.S. costs. Second, beyond resource transfers there is an equally urgent need to find more efficient and effective approaches to educational problems through experimentation with innovative approaches. Third, vocational training programs have a better chance of success if students enter them early, if the academic training is closely related to "hands-on" apprenticeship situations, and if the training clearly leads to specific employment opportunities. Fourth, given the importance of basic education in the "seamless web" of development priorities, A.I.D. should not let its capabilities atrophy or resource availabilities wither in this sector to the point when it can no longer play a meaningful role where the opportunity exists, as it did in Nepal, to impart U.S. values and techniques and make a significant contribution to developing a country's basic education system.

PROJECT DATA SHEET

Primary Education Sub-Sector, 1954-1975

USAID Primary Education Projects (or Projects Which Had Primary Education Components) and Project Numbers:

1.	Educational Activities	67-67-907
2.	Teacher Training and Related Activities	67-66-908
3.	Education Development	367-67-018
4.	Education and Training	367-67-018
5.	Primary Education	11-640-059
6.	Teacher Training/Higher Education	11-660-061
7.	Education Materials Development	11-690-063
8.	Primary and Teacher Training	11-640-093
9.	Teacher and Technical Education	11-650-060
10.	Teachers and Materials Utilization and Development	11-690-228

Goal of Projects: Develop a system of primary education

First Project Began: March 1954

Last Project Terminated: June 1975

Amount: $9,112,500 (For Primary Education only out of total of $16,617,000 for above projects)

Government Sponsor: Ministry of Education

Achievements:	1951	1975
Number of Schools	321	8,708
Number of Students	8,505	401,035
Percentage of Female Students	1	17.3
Students as Percentage of Relevant Age Group	0.9	59.0
Number of Teachers	640	17,728
Number of Trained Teachers	20 (est.)	7,287
Literacy Rate	2%	17%

Estimated Number of Beneficiaries:

2,151,240 (Primary Level Students Who Attended School Between 1954-75).

Cost to AID Per Beneficiary:

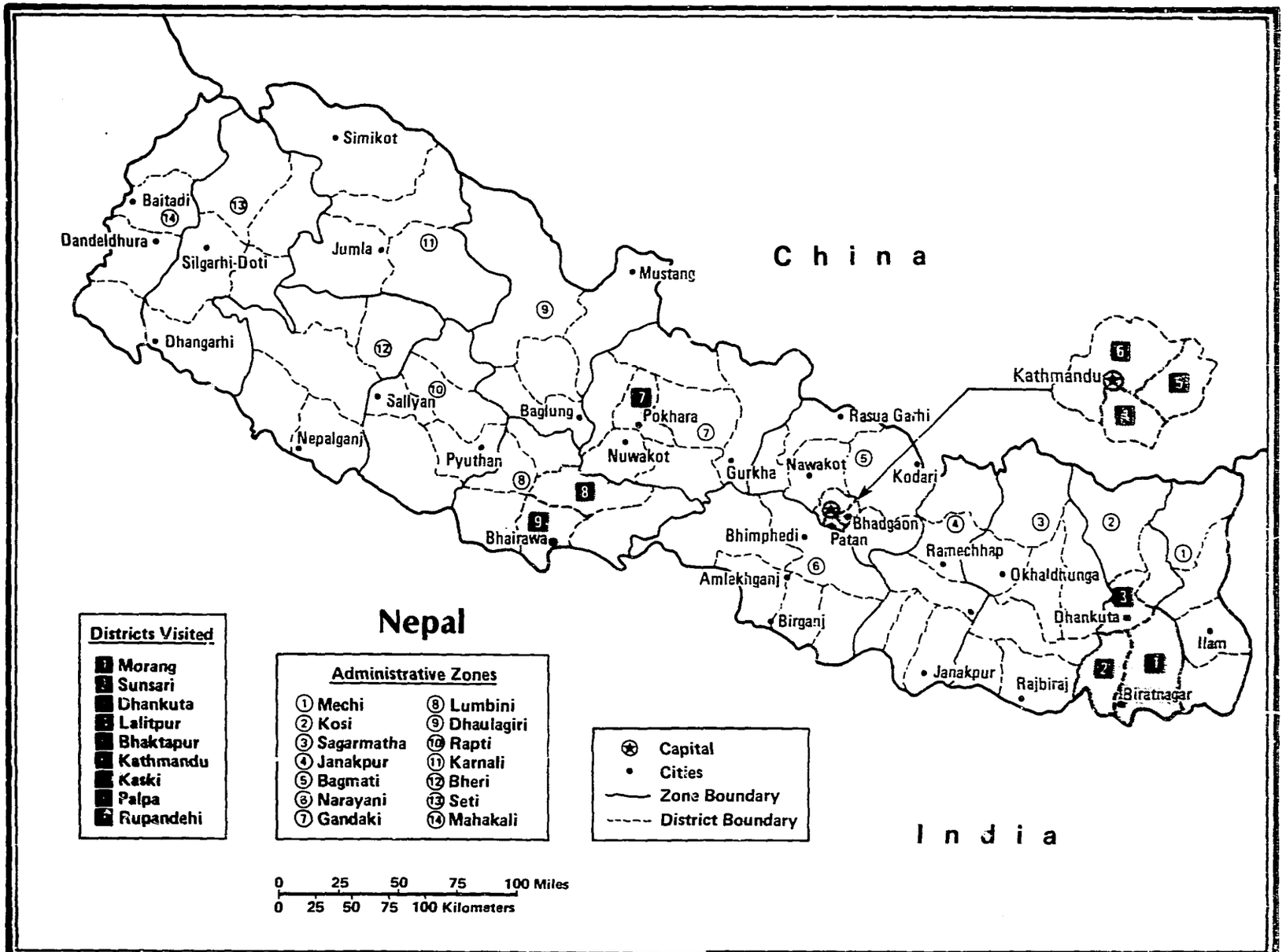
$4.24 = Amount ($9,112,500) ÷ Number of Beneficiaries (2,151,240).

Exchange Rate at Time of Project:

$1 = RS. 11.95

FREQUENTLY USED ABBREVIATIONS

MOE	-	Ministry of Education
IOE	-	Institute of Education
CERID	-	Centre for Educational Research, Innovation and Development
HMG	-	His Majesty's Government
NESP	-	New Education System Plan
GON	-	Government of Nepal
SIU	-	Southern Illinois University
NPC	-	National Planning Commission
JEMC	-	Janek Education Materials Centre
UO	-	University of Oregon
SLC	-	School Leaving Certificate
NVTC	-	National Vocational Training Center
USOM	-	The United States Operations Mission


Simikot
Baitadi
Dandeldhura
Silgarhi-Doti
Jumla
Mustang
China
Dhangarhi
Sallyan
Baglung
Pokhara
Nepalganj
Pyuthan
Nuwakot
Gurkha
Nawakot
Rasua Garhi
Kodari
Kathmandu
Bhadgaon
Patan
Bhimphedi
Ramechhap
Okhaldhunga
Amlekhganj
Dhankuta
Ilam
Birganj
Janakpur
Rajbiraj
Biratnagar
Bhairawa
Nepal
India
Districts Visited
Morang
Sunsari
Dhankuta
Lalitpur
Bhaktapur
Kathmandu
Kaski
Palpa
Rupandehi
Administrative Zones
① Mechi
② Kosi
③ Sagarmatha
④ Janakpur
⑤ Bagmati
⑥ Narayani
⑦ Gandaki
⑧ Lumbini
⑨ Dhaulagiri
⑩ Rapti
⑪ Karnali
⑫ Bheri
⑬ Seti
⑭ Mahakali
Capital
Cities
Zone Boundary
District Boundary
0 25 50 75 100 Miles
0 25 50 75 100 Kilometers

I. INTRODUCTION

Our team walked up the steep dirt street, through the bustling market with colored beads and brass pots for sale. Shortly we were above Tansen walking the narrow paths that ring the hills overlooking the city. Heading east, we followed the district primary school supervisor up and down hills for four hours. Finally, we arrived at the primary school we intended to visit to find that the building had collapsed six months previously. But in the yard in front of the school sat three small groups of children, each child with a textbook, and one teacher going from group to group. Primary education is alive, if struggling, in Nepal, and AID has played a major role in its development.

This evaluation of the educational system in Nepal differs from most AID Impact Evaluations in that it measures the impacts not of a single project, but of a series of projects running from 1954 through 1975 (see Table 4). These projects dealt with primary education, teacher training, vocational and secondary education, curriculum and materials development, and the institutional development of the entire education system, including the training of over 300 Nepalis in the U.S. and third countries. Apart from higher education, this evaluation covers not so much a project as a sector, with particular but not exclusive emphasis on primary education.

Given incomplete documentation and the lack of specific achievement indicators for projects developed in Nepal during the 1950s and 60s, it was not possible to locate a detailed set of objectives with baseline data and then measure precisely the extent to which they were achieved. As one might expect over such a long time period, the objectives tended in any case to shift in emphasis. In general, however, the objectives of AID assistance were to expand Nepal's embryonic education system rapidly, to improve its quality, and to help develop curricula, texts, and teachers who could provide education relevant to Nepal's needs. These are the objectives against which we assessed program results.

AID was extensively involved in Nepal's education sector from its earliest attempts at modernization. Indeed, AID was the only major donor in education during the 20-year period under consideration (except for training of a considerable number of Nepali educators in India). The effectiveness of AID's assistance is therefore closely related to overall Government of Nepal (GON) progress in education during this period. Consequently, we devote considerable attention to assessing the present education system in Nepal, in the belief that many of our conclusions are applicable to AID's assistance as well as to GON performance.

In performing the evaluation we asked the following questions: (1) To what extent did the GON and AID succeed in achieving their objectives for the education sector? To what extent was AID assistance important to these outcomes? (2) What impact did the educational gains, especially in primary education, have on Nepal's development? In particular, what impacts, if any, were discernible in other sectors such as agriculture, health, and family planning? What were the impacts on the role and status of women, on equity, and on broader participation in the political process? What relationships were found, if any, between

levels of education and changes in the attitudes, aspirations and values of the people of Nepal? (3) How appropriate was the education system to Nepal's development needs and opportunities, both in content and cost? (4) Were the gains institutionalized, i.e., capable of being carried forward by the GON without continued heavy dependence on outside aid - both financially and in terms of human resource and institutional capabilities? (5) Finally, what lessons could be derived from our findings for future programs and policies?

The evaluation methodology (discussed more fully in Appendix A) involved a combination of literature and project documentation review, interviewing key personnel, and field surveys in three different areas of the country. In the surveys we sought first-hand impressions of the school system in rural and urban areas and measurement of the impact on ordinary Nepali citizens of the education they had received. This work was conducted in Nepal from September 15 to October 3, 1980; a draft report was completed by October 7 and reviewed with the Ministry of Education and USAID/Kathmandu before the team departed on October 10. Their reactions are reflected in this report.

II. BACKGROUND AND SETTING

Nepal is one of the half dozen or so poorest countries in the world, with per capita income estimated at $120 in 1978. 1/ When Nepal in 1950 ended a century-long policy of deliberate isolation from the outside world, she was less a nation-state than a population of enormous ethnic and linguistic diversity; most people lived in inaccessible small villages in the remote hills and mountains of central and northern Nepal, and few of them knew of a world beyond their immediate family and village. In 1950 the Rana family had ruled Nepal for a century under a feudal autocracy with hereditary prime ministers, the King reduced to a powerless figurehead. The primary objectives of government were the preservation of order and revenue collection, with no clear distinction made between personal and public uses of funds. "Development" was not seen as a government function, nor did the administrative or financial systems exist to implement it. Education for the masses was actively discouraged.

In 1947, sparked in part by India's gaining independence from Great Britain, the people of Nepal began to agitate for a government more responsive to changing times and the needs of the people. An armed revolt led by King Tribhuwan overthrew the Rana regime in 1951.

At this time there were only 321 primary schools in the country, enrolling about 8,500 pupils, less than 1 percent of the primary school age children. There were 11 secondary schools with a total enrollment of about

1/ Footnotes on pages 21 and 22

1,700, one small college and a technical school with a combined student body of only 250 (see Table 1). There were no educational facilities for girls and the few who were educated were privately tutored or sent to institutions in India.

The new government recognized the importance of an education system to spread a common language (Nepali) and a sense of national identity, as well as to provide basic literacy and the skills and attitudes needed to forge a modern unified nation. The government also stated that education is an essential ingredient in the development of a democratic society and began in 1952, in response to popular demand, a process of rapidly expanding educational opportunities that continues to this day. A National Education Planning Commission was established in 1954 to devise a uniform pattern of education for the country. It issued a comprehensive report which became the key policy document for the development of Nepal's educaton system from 1955 through 1971. This report, Education in Nepal, called for establishing a single system of free, tax-supported, public education from the primary grades through college. It recommended numerous laws in support of this new educational system, including tax and land reform, considered a prerequisite for financing such a large scale undertaking. The report proposed establishing a curriculum development and textbook publishing and distribution center to develop primary, secondary and vocational school curricula appropriate to Nepal. The report also recommended establishing a national university and teacher training facilities, and called for "...the best education environment possible..." with central leadership coming from the Ministry of Education (MOE). The Ministry was to establish its own research department and organize its administrative and supervisory policies "...to conform with modern democratic practices, with a large measure of decentralization." This organization was to extend down to the local school boards, and reflected the recognition that the GON had neither the personnel nor the financial resources to carry out all these recommendations without substantial responsibility being assumed by local communities. 2/

The United States Operations Mission (USOM) was deeply involved in these early efforts to develop educational policies and an educational infrastructure in Nepal. A USOM contractor, Dr. Hugh Wood of the University of Oregon, acted as a consultant to the National Education Planning Commission and was a major contributor to the Commission's report. The signing of the first USOM-MOE Project Agreement in March 1954 marked the beginning of 20 years of major U.S. involvement in Nepalese education.

III. THE PROGRAM: ACCOMPLISHMENTS, PROBLEMS AND ANALYSIS OF RESULTS

AID gave Nepal nearly $19 million for education projects from 1954 through 1975. (See Tables 3 and 4 for sub-sectoral and project breakdowns.) Though not a massive amount by today's standards or even for the period involved, in relation to amounts going into larger countries (e.g., India, Brazil, Colombia), this was a significant contribution for a country of Nepal's size. Indeed, in relation to Nepal's own resources it was a

massive contribution: at peak levels of support, during the 1963-67 period, AID's input actually represented two-thirds of the MOE budget (see Table 2) and was used in part basically for MOE budget support. A key factor in AID's ability to provide this high level of support was the availability of PL 480-generated Indian rupees in addition to U.S. dollar financing. Over $13 million of the $19 million provided was in rupees, which were used for construction of buildings and facilities and other local costs, for support of the MOE budget for teachers' salaries, and for participant training in India.

A. Primary Education

One of the key recommendations in the Commission's report was for universal primary education, and USOM responded by providing major and crucial support in this area, especially from 1954 to 1971. Advisors were provided from the University of Oregon (1954-1959) to assist in developing a new and relevant curriculum for primary education, and the local currency support described above was provided. Funding began with the signing of a project agreement in March 1954 (Education Activities) and continued through 1967, the final year of budget support for the primary education program. Subsequent support for development of primary education focused on teacher training activities.

The following indicates the rapid quantitative growth of the primary school system and the resultant increase in the literacy rate between 1951-74:

	No. of Primary Schools	No. of Students Enrolled	Enrollment Rate - %	Adult Literacy Rate - %
1951	321	8,500	1	2
1974	8,267	458,500	43	16

The magnitude of this achievement is apparent if one considers that most European countries and the U.S. did not achieve effective compulsory schooling (in the sense that nearly all children attended school at least irregularly) for children of primary school age until the period 1870-90, and it took the U.S. 100 years to achieve an enrollment rate of 75% of school age children. 3/

However, the quality of the instruction and the level of learning in Nepal remain extremely poor. Rote memorization is still the predominant mode of instruction, and the percent of unqualified primary school teachers is increasing. Various studies and informants suggest that oral comprehension and reading ability (in Nepali) are quite good, but that writing and mathematics are very poor. A recent study of the effectiveness

of primary education took 2;000 students who had completed the third grade and determined that, based on the objectives of the grade 1-3 curriculum, only 28 percent of the students scored over 60 percent in arithmetic; 76.4 percent in writing; 92.2 percent in reading. 4/ A pilot literacy retention study done by a local consulting firm tested 217 students who had completed three grades and been out of school from 1 to 4 years and found that the overall achievement was at the grade 2 level, that writing ability was lower than reading, and that in arithmetic and the application of basic literacy skills (i.e., writing a simple letter), the graduates were semi-literate at best. 5/

The reasons for this situation are many: the physical distance of schools in rural areas and overcrowding in urban areas; the poor physical condition of schools (dampness, lack of heat) which creates health problems and encourages absenteeism; a high and growing percentage of unqualified teachers (over 60 percent), who lack both subject matter knowledge and pedagogical training; poor teacher motivation due to low pay, low status, and adverse working conditions including lack of teaching materials and equipment, resulting in high absenteeism from the classroom; and poor teacher supervision because of inadequate training, motivation, transportation, and number of supervisors. Finally, there is heavy pressure to pass students despite poor performance, little control over and a tolerant attitude toward cheating on exams, and the susceptibility of teachers in this regard to local pressures and patronage.

The main reason for these qualitative problems is the basic decision to give first priority to a high rate of quantitative expansion, so that everyone will be able to attend school. "Something is better than nothing," as one official put it. The basic conditions of under-development, especially in rural areas, aggravate the problems, as do the remoteness and ruggedness of the physical terrain and lack of communications or transportation links.

In addition to these qualitative problems, the primary system (and the secondary system to a lesser extent) suffers from problems of efficiency. A recent World Bank report concludes:

> Strong efforts must be made to improve the efficiency of the education system, both to reinforce its impact as well as to contain future education costs. Due to the large number of drop-outs and repeaters, it presently takes more than 6.5 student years to produce a single graduate over the three-year primary cycle. Some 45 percent of all students fail to make it beyond grade 1. As a result, perhaps as much as half of the expenditures on primary education are being wasted. Similarly, at the secondary level, only 30-40 percent of grade 10 students in recent years have passed the School Leaving Certificate (SLC), again indicating a significant waste of resources. Numerous causes can be identified including the poor quality of the education provided, the sub-standard health and nutritional condition of many students, and the high opportunity cost to child labor. 6/

The phenomenon of the 45-50 percent dropout rate after the first year is not fully understood, but based on our personal interviews and other comments it seems related to exaggerated parental expectations for visible progress toward literacy after only one year, plus the need for children's labor at home and the fact that at age 9-10, children are better able to assume household or farm tasks than at age 6-8.

B. Primary and Technical Teacher Training

Teacher education has been the single largest sub-sector of U.S. education assistance to Nepal. Again, this assistance followed the recommendations of the Commission's report, which called for immediate establishment of primary teacher training facilities, a degree-granting teachers' college, special training for those who would become teacher trainers, and special refresher courses for experienced teachers.

USOM/AID involvement in primary teacher training began with a project (Teacher Training and Related Activities) under which the University of Oregon contract group assisted in establishing the first school for training of primary school teachers. Two years later, mobile teams were formed to carry teacher training to remote parts of the country. These teams later evolved into permanent teacher training facilities. Also, from 1954-1958 sixty teacher trainers and education administrators were given training, many of them at the University of Oregon. The influence this core group has had on the development of the Nepalese educational system has been considerable. A College of Education to train secondary teachers, educational administrators and primary teacher trainers, was also established under this project.

In 1959 a new project agreement was signed (Education Development), the University of Oregon contract was terminated, and AID direct-hire technicians were recruited to continue assistance to the teacher training activities. Direct-hire technical assistance continued through most of the 1960s. In the late sixties a five-man Southern Illinois University (SIU) contract team arrived to assist in establishing a vocational teacher training facility, and later to assist in firmly establishing general teacher training and education research capabilities. Under this project PL-480 funds were used to begin planning and construction of several training facilities, including a new plant for the College of Education and the attached laboratory school. These facilities were completed under subsequent agreements which continued the efforts begun under these early projects. By 1971 the infrastructure was in place for comprehensive pre-service and in-service teacher training.

USAID also became involved at an early stage in the training of vocational teachers to instruct in the so-called "multipurpose" schools which had been called for in the Commission's 1955 report to reorient a traditional, totally academic secondary system toward a more practical program. USAID assistance in this effort included advisory services, participant training, substantial commodity inputs, and local cost support. The major thrust was toward establishing a vocational teachers' training center. The SIU contract team helped establish teacher training programs in four vocational areas (agriculture, industrial education, home economics, and business education). PL-480 funds were used to construct the National Vocational Training

Center (NVTC) and a demonstration school near Kathmandu, and overall U.S. assistance to this project continued until 1971. Over 100 students had completed the two-year course by 1971 and about 50 percent of these secured employment in their field of training. However, the vocational curriculum has not been successful overall, and the MOE under currently evolving policies is attempting a complete restructuring of vocational education (see D below).

The number of teachers trained, especially at the primary level, is remarkable. In 1951, there were 640 primary school teachers in Nepal; in 1975 there were 17,728. As the numbers suggest, a teacher training capacity was developed that could and does function to this day to supply teachers for the rapidly increasing primary education system. The College of Education, now the Institute of Education, has 13 campuses around the country where those who have obtained the School Leaving Certificate (SLC) can, with one year of training, become qualified primary school teachers.

Despite the impressive leap in numbers, the shortage of qualified primary school teachers remains a distinct problem. The rapid increase of primary schools in the past 25 years was bound to place pressure on other parts of the system and especially on the teaching force. Also, the opportunity for primary school teachers regardless of their entry level to move up to better paying lower secondary and secondary school positions by obtaining additional training has resulted both in a shortage of primary teachers overall and in more untrained than trained teachers at the primary level. The quality of instruction has suffered.

If and when the rapid growth rate of primary schools slows down, the opportunity will exist to uphold higher standards at the primary school level. The proliferation of in-service training programs during the past ten years seems to have exacerbated the problem. Many teachers entered the primary system without the SLC, took advantage of the government-supported in-service training programs and moved on to lower secondary positions, leaving the primary school to another round of unqualified teachers. The MOE, aware of this problem, has initiated a Radio Education Teacher Training project with assistance from USAID to reach untrained teachers at their schools. The program will upgrade their teaching skills but not provide the diploma for easy access to the next level, and thereby hopefully reduce substantially the loss rate and costs of the present system.

It is perhaps in this area of teacher training that the evidence of USAID supported quantitative growth is most dramatic, but where the present challenge for qualitative improvement is greatest.

C. Curriculum and Materials Development

At present all school curricula in Nepal are prepared, approved and revised as necessary in the Curriculum, Textbook and Supervision Development Centre of the Ministry of Education. This center and its predecessor organizations have played a vital role in creating for

Nepal appropriate textbooks written in the Nepali language, and there is general consensus that this has been one of the most effective areas of GON performance in education and AID support thereof. Of the people interviewed, educators and receivers alike agreed that the current series of textbooks, as they have evolved, are a vast improvement over the hodge-podge of foreign and privately printed Nepali texts which existed until the mid-1960s. We reviewed some of the primary school texts presently in use and found the subject matter content generally appropriate and relevant to rural life in Nepal.

USOM/USAID involvement in this effort began in 1960 under the Education Development project, which provided technicians, facilities construction, equipment, staff training, and other necessary support. An Education Materials Organization (EMO) was established which was originally responsible for both the writing and the production and distribution of texts. These functions are now separate, with only the production and distribution functions being carried out by the semi-autonomous Janak Education Materials Center (JEMC), successor to the EMO, which is currently headed by a Nepali graduate of the University of Southern Illinois. Curriculum development and textbook writing and revisions are carried out by the curriculum center referred to above, which is currently headed by a Nepali woman trained at the University of Oregon. The JEMC is one of the most successful of the AID-funded education activities in Nepal. Started before 1959 as a small, poorly housed education press attached to the College of Education, today it publishes and distributes all the textbooks used by Nepalese students in the primary grades through high school, in its own facilities on the outskirts of Kathmandu.

The JEMC was completed in 1966 and was immediately beset by numerous problems. The pricing of textbooks was a major concern, especially as the price of paper continued to rise on the international market, and revisions in the texts increased costs. Distribution was also a major problem in a country with few roads and numerous mountain settlements. The JEMC often fell behind in its production targets for lack of printing equipment and in the face of rapidly rising demand for textbooks as school enrollment skyrocketed. In addition, obstacles were created by private printers and booksellers, who were opposed to government standardization and government production of textbooks.

However, the JEMC now deals effectively with these problems, though not without continuing donor assistance. UNICEF is currently providing printing paper to enable the MOE to distribute free textbooks to all primary students in grades 1-3, and prices have been standardized for lower and upper secondary school textbooks. It is planned that primary school will be extended to include 4th and 5th grades as well, which will increase the demand for free textbooks. (Partially to alleviate this pressure, a single "integrated" textbook is being developed which will replace two separate texts now used by primary level students.)

Over the years numerous texts have been revised, especially during implementation of the New Education System Plan (NESP) curriculum from 1971-77. Many texts are now improved so that new editions are less frequent, but given impending changes in the school curriculum, further revisions may be necessary in the near future.

The textbook distribution problems seem to be largely solved, at least with continued UNICEF support. Virtually none of the informants we interviewed cited any problems in the availability of textbooks, which are provided directly to the schools for free distribution through 3rd grade and purchased by lower and secondary students through local booksellers. The only complaint was that texts occasionally arrived late in the school year. Also, obstacles created by the private sector have declined over the years.

In summary, the MOE with initial significant AID support has achieved its goal of creating a totally Nepali curriculum, and a textbook production and distribution system that is superior for a country at Nepal's level of development.

D. Vocational Education

Vocational education has been a problem area in Nepal, as in other countries, despite the GON's policy from the outset of according recognition to the dignity of labor by including vocational subjects in the general curriculum, and despite heavy U.S. support and presumed expertise in this area.

The goal of the MOE in vocational education has been to combine a traditional academic curriculum with one that is practical and vocationally oriented and thus in keeping with Nepal's development needs. USOM/USAID's involvement in this effort began in 1954 under the Education Activities Project and included technical advisors, participant training, construction, commodities and general support.

Assistance continued to 1971 and concentrated on helping the MOE to establish a viable vocational education curriculum at the secondary school level. This curriculum was to provide high school students with "pre-professional" training in one of four areas: industrial arts (furniture making, mechanics, etc.); commerce (business administration, accounting, shorthand, typing); home economics (cooking, sewing, etc.); and agriculture (animal husbandry, horticulture, poultry). In the late 1960s courses in one or another of these subject areas were offered to all upper secondary students attending one of the so-called "multipurpose" schools. In 1971, the NESP called for a vocationalization of all secondary schools, and once the new plan was implemented, all upper secondary students in Nepal took a small percentage of vocational courses in addition to regular subjects. Now, however, in recognition that intended objectives were not achieved, the emphasis on vocation education is shifting, and the secondary education system seems to be moving back to a more traditional model. The MOE is now moving to establish trade schools in lieu of vocational high schools. Although the details are not entirely clear, it appears that students will begin vocational training at lower grades and that it will involve a much higher percentage of practical and vocational training. If so, these are steps in the right direction.

There appear to be several reasons for the failure of vocational training. First, as the curriculum and the National Vocational Training Center (NVTC) developed, there was too much emphasis placed on sophisticated equipment inappropriate to Nepal. The NVTC, established to train secondary vocational teachers, soon evolved into a center with overly elaborate made-in-America equipment.

More fundamentally, it appears that the vocational education program at the secondary level has failed because: (1) the level of vocational training has been insufficient to fully qualify the student for employment or self-employment, (2) economic and social incentives do not exist to attract Nepali youth into vocational occupations and away from the pursuit of post-SLC education and white collar employment, and (3) students have therefore used the multipurpose/vocational high schools as springboards to college entrance. Nepali students who reach even the secondary school level regard themselves - and in fact are - among the educational elite of the country and, as such do not expect blue collar careers. The design of the vocational program, however well-intentioned, failed to take sufficient account of these incentives and aspirations in Nepali society.

E. Education Administration and Training

Virtually every USOM/USAID-supported education project in Nepal has included elements concerned with establishing or strengthening the education system's administrative infrastructure. In the early 1960s the Education Development and the Education and Training projects provided training for various MOE officers (local, third-country, and U.S.). Under other projects, local in-service training was conducted and U.S. technicians were involved in helping to establish and strengthen the administrative procedures of the burgeoning education system.

The U.S. and third-country participant training of key people in education played an important role in the development of the sector. From 1953 to 1975, 310 Nepali educators were trained either in the U.S. (205) or a third-country (105). By far the largest number of these people (222) spent at least one academic year in training. The areas of training span the entire educational system, but teacher training, vocational education, and educational administration were three major areas of emphasis. The U.S. was by far the largest source of training support during the 1954-65 period, followed by India (see Appendix E).

F. The New Educational System Plan (NESP) of 1971

As one would expect, the GON's objectives did not remain unchanged during the extended period of AID support, especially since Nepali educators were being trained who would increasingly prove capable of taking the reins of educational policy into their own hands. After 15 years of rapid growth, severe strains developed within the education system, and in 1970 the NESP was promulgated. The NESP, called by

some Nepal's declaration of independence from U.S. policy dominance, does not in fact appear today to be as radical a departure from earlier policies as is sometimes claimed. The NESP nevertheless articulated a number of important changes: increasing access to education in rural areas, especially for women; adapting education more fully to Nepalese development needs; and meeting more clearly defined workforce requirements. In order to achieve these goals, tuition and textbook charges were progressively eliminated for the primary grades (which were redefined to cover only grades 1-3), a new curriculum emphasizing vocational education was introduced and extended to all secondary schools, and the examination system was reformed. Beyond these changes, more creative teaching approaches were advocated under the new plan, and further steps were taken to train teachers in new teaching techniques.

The NESP advocated a significant departure from the tradition of rote learning, outdated curricula and texts, and the lecture method of teaching. Underlying its specific goals was the concept of a scientific and investigative approach to learning which, if successful, would have signaled a significant change in the traditional approach to education. Implementation of the NESP has been only partial, however, and, the view still seems common among non-educationists that knowledge exists merely to be received and passed on without benefit of critical examination or even practical use. At the same time, certain aspects of the plan have been successful. The availability of education has greatly increased, especially in rural areas; there are more females in school than ever before; more appropriate curricula have been designed; textbooks are more freely available; and though the overall quality of teaching is not high, there is clear recognition that this is an important area for improvement.

At the same time, the NESP changes illustrate a seeming paradox: that there is often a trade-off between equity and local participation. Initially the MOE had recognized that to expand the school system rapidly it would have to rely heavily on local financial contributions. Thus local villages and parents were required to pay substantial amounts for construction, salaries of teachers, texts, and school supplies. With the NESP reversal of these policies, the school was now perceived as a government school rather than as the community's, so villagers no longer felt responsible for keeping it going. And teachers who had been accountable to a local school board now became accountable instead to a remote and seldom-seen supervisor; i.e., became much less accountable for their performance. This problem has been recognized, however, and recent policy changes are intended to return some control and responsibility to local communities. Although this will result in some loss of equity, the gains in increased local participation and control should be of greater value: in teacher/headmaster accountability and effectiveness; in calling forth local resources to supplement the financially hard-pressed MOE; and because of the values inherent in participation rather than dependence. It is hoped that the MOE in defining and implementing its new policies will seek and find ways, through appropriate cost sharing formulas, to minimize the equity losses while maximizing local financial and other participation in running the schools.

IV. PROGRAM IMPACTS: FINDINGS AND ANALYSIS

A. On Education

"No matter who you talk to in Nepal, everyone agrees that the most important thing AID has ever done here is its work in the education sector."

- William Nance, USAID Program Officer and former Peace Corps Volunteer in Nepal

On balance the national effort to establish a primary school system accessible to all school-age children is remarkable in its rate of expansion and breadth of development. Few countries in the world have expanded enrollment as rapidly or as widely. Also remarkable is the production and distribution of textbooks, an accomplishment far beyond what is normally observed in a developing country of Nepal's level, especially one where transport and communication are so difficult. Clearly, USAID assistance was instrumental in both of these efforts.

The pace, however, has not been without its costs. The number of schools has now outstripped the ability of the rest of the system to perform adequately. While more children each year have the opportunity for schooling, the teaching they receive and level of learning they accomplish are deficient. In addition, the vocational education system created with AID guidance and support is clearly a failure.

The MOE is well aware of these problems and has taken steps to improve the situation. The NESP is a determined effort to make the educational system more vocationally oriented without making those students who take the skills training track appear as second class citizens. The government's decision to fund teachers' salaries and other educational costs centrally is an attempt to assure more equitable distribution of resources throughout the country. These are bold steps and their lack of full success to date does not gainsay the ability and courage of the policy-makers and administrators who made them. Though the participation in these processes of educators trained with AID financing cannot be specified precisely, AID's contribution to the training of key personnel has clearly been substantial.

The question remains whether the strategy of rapid growth was the correct one. Yet this may be a moot question inasmuch as this key policy decision was almost certainly not and could not have been influenced by outside advisors; it was made in response to strong popular pressure for and belief in the paramount importance of universal primary education. At least there now exists the infrastructure and a cadre of trained personnel to improve upon a functioning system.

At the same time, with the wisdom of twenty years' hindsight it does appear that with the exception of the teacher training radio project currently under way, the history of AID's support to education during 1954-75 offers little to indicate that innovative alternatives

to conventional educational models were being advanced. We know, however, that individual education advisors did at times make important policy interventions and sought to promote such alternatives as radio education for direct instruction. Nepal, with its severe financial and human resources limitations and its inaccessible hill areas, is a country in particular need of such alternatives. For example, some thought could profitably be given to flexible scheduling of the school year so that the school cycle is more in tune with the agricultural cycle. More radical changes in scheduling could have children attending school in alternate years or the first three months and last three months of the year with another grade using the middle six months. Then, too, much more creative use could be made of peer tutoring or cross-age tutoring to vary the pattern of group recitation in class while maintaining or in some instances increasing the pupil-teacher ratio. These suggestions, which are illustrative of other models that could be considered, do not however replace the need to concentrate first and foremost on improving the quality of teaching in the classroom.

B. On Other Sectors

Our field surveys tended to confirm in most respects the conclusions of studies by the World Bank, AID, and others which have shown that basic education contributes to economic growth, agricultural development, lower fertility, and improved health and nutritional status. Similarly, our surveys supported these studies' findings regarding the contribution of basic education to generally expanding awareness, informing decision-making and facilitating the transmission of new attitudes, knowledge and practices which can promote development and the achievement of national goals. 7/

1. Agriculture

In 1979 the World Bank reported on 20 independent studies which concluded that, after controlling for all major variables including size of land holding, farm productivity was at least 7 percent higher where the farmer had at least 4 years of schooling. In the Nepal study, the estimated increase in annual farm output in the Terai due to four years of primary education was 20.4 percent. Thus in Nepal as in other developing countries a very limited amount of education improves farmer receptivity to extension advice and new technologies, particularly when new crops are involved. 8/ Our team interviews with farmers in the Terai supported this receptivity to change in agricultural practices among those having attended primary school. We found a close relationship between the level of education and application of new agricultural practices.

2. Family Planning

One of the most consistently observed development trends is the close association between education - especially education for women and girls - and reduced fertility. Education of women exerts a stronger negative impact on fertility than any socioeconomic variable. The

World Fertility Survey reported in 1977 that literate Nepali women married less than five years had a 20 percent lower fertility rate than those women who were illiterate.

While recent indications in Nepal are positive that educating women improves the chances of their adopting family planning practices, the birth rate in Nepal remains extremely high. The reasons, as cited in USAID/Nepal's Fiscal Year 1982 Country Development Strategy Statement, are many and complex: (1) contraceptives and surgical services are still not readily accessible to the majority of the rural poor; (2) many couples still expect a fourth of their children to die before reaching adulthood; (3) women are still a small percentage of the educated population (20 percent) and the age at marriage is low for both men (20.8) and women (16.7); and (4) parents, for cultural and economic reasons, have a strong preference for sons.

One of the strongest and most consistent responses from women interviewed by our teams was the desire to limit the size of their families. Among the interviewees a change of attitudes had taken place about the value of large families. The lack of access to contraceptives appears to be holding down the percentage of those practicing family planning.

3. Health

Education is not the only important determinant of health: other important factors are (a) people's incomes and the prices of such goods as food, fuel, soap, water and medical sources, and (b) the health environment: climate, sanitation standards, and the prevalence of communicable diseases. But people's understanding of health, hygiene and nutrition is also very important, and this appears to be closely related to education levels, especially of mothers. 9/ The World Bank observes that "studies in 29 developing countries have shown that infant and child mortality rates were consistently lower the better educated the mothers; each extra year of schooling on average meant nine per 1,000 fewer infant and child deaths. Cross country studies...confirm that literacy has a strong, favorable effect on life expectancy." 10/ Nepal has both a very low literacy rate, especially among females, and a very high infant mortality rate. The health-related questions in our field survey proved inconclusive, but physical observation revealed a low level of knowledge of hygiene or sanitation. Dugout toilets were rarely used; animals were often not segregated from human habitation; boiling water for small children did not seem to be the practice; and people sought the magic of pills or injections rather than cleaning wounds preventatively. 11/ Yet hygiene is a part of the primary school curriculum and teachers frequently cited improved sanitation behavior as partial evidence that education was making a practical difference in the lives of their students. It is hoped that this will become more evident as female enrollment continues to increase.

C. On People's Attitudes and Behavior

In personal interviews we sought to measure the correlation between education levels and some of the aspirations, attitudes and behavior ("non-cognitive" factors) that are generally considered important to development, such as receptivity to new ideas, willingness to take risks, higher aspirations rather than static expectations for the future, feelings of control over one's destiny versus fatalism, and awareness of and participation in a broader world than one's immediate family and village. As discussed in Appendix A, our survey has a number of methodological limitations. Probably the most significant is the inability to control for other important variables in addition to education, such as income level. However, with this caveat in mind, we did find a distinct pattern of correlation between levels of education and the behavorial and attitudinal characteristics described above. (See Appendix B for detailed survey findings.)

Certain other impressions of interest also emerged in a less structured way. The strongest impression we gained from those interviewed was the high value they place on schooling either for themselves or for their children. 12/ They viewed education as a way to better one's lot in life, perhaps to move off the farm into a job not requiring manual labor. While the fathers interviewed still spoke of marriage as the primary goal for their daughters, mothers spoke more often of education and their daughters becoming teachers. We encountered almost no bias against females attending school or eventually becoming teachers. In fact, many were strongly in favor of both.

Second, the younger parents wanted to limit the size of their families. This may reveal a bias in our sample given Nepal's current birth rate, but those interviewed clearly and forcefully expressed their desire to have fewer children and to educate them more fully. Most left the future decision about the specific occupation or profession to the children.

Finally, those with more education tended to value and obtain information from outside the family or immediate village. Farmers educated through the primary level more often mentioned extension agents and changes they had made in agricultural practices. Many saw education as the means for increasing awareness, communications skills, and providing a defense against being cheated or tricked in the marketplace. Hospitals were within reasonable walking distances for most of those interviewed so that health care practices were fairly uniform across different levels of schooling. But listening to the radio and reading newspapers were highly correlated with educational level. Interestingly, the favorite program of the radio listeners was an agricultural extension program.

D. On Women

Although program documents reveal no stated USAID objective to enhance the role of women in Nepal, the education program has made

a difference in this area. In 1954 there were virtually no female teachers and less than 5 percent of eligible girls were in school. By 1977 this situation had improved significantly. In the Far Western region, the enrollment ratio for primary school-age girls was 17 percent, for the Central region 27 percent, for the Eastern region 32 percent, and for the Western region 47 percent. The national ratio for girls at the lower secondary level was 18.4 percent and 16.6 percent at the secondary level.

The latter two numbers are encouraging since one major reason cited for not sending girls to school is the lack of female teachers. While the participation of females in school is slowly increasing, it would be accelerated if the government found ways to support and encourage more females to become teachers. In 1972, 22 percent of the primary school teachers were females. On the basis of our field observations, it appears that the great majority of these are in urban areas, though we found much receptivity in rural as well as urban areas to having more female teachers, who some felt would control and work with the children more effectively than men.

Nonetheless, there remains a strong social attitude in many rural parts of Nepal towards keeping girls at home, in order to use their labor and to protect and prepare them for the child-rearing role associated with marriage. Rural families need the help at home and often do not perceive a sufficient offsetting economic return for sending their daughters to school. One factor slowly changing this perception is the growing demand by educated men for educated wives. Unless schools become more accessible at both the primary and higher levels and unless more parents can begin to perceive either short-term or even long-term economic and social payoffs to them and their children for attending school, the changes in the role of women will continue to occur primarily in the major towns and much more slowly in the rural areas.

E. On Equity

Equity considerations were not addressed explicitly in project design, though they were implicit in the objective of moving toward universal primary education. One important equity area - distribution of primary educational resources by sex - has been discussed above. Another important area is the great variation between different districts and geographic regions in enrollment ratios. The Far Western and Central regions lag substantially behind the Eastern and Western regions in enrollment. 13/ Surprisingly, a large percentage of the districts in the more affluent Terai have low enrollments.

Although we have no data on this, it seems clear that income levels and caste also have some bearing on enrollment. There is evidence that low school fees or textbook charges have discouraged school attendances by the poorest families: witness the great increase in primary school enrollment when books and tuition were made free for grades 1-3 under the NESP and thereafter. As for caste, we have anecdotal evidence from field visits that low-caste persons are sometimes put under pressure not to attend school.

Despite these remaining inequities, it seems clear that the vast increase in school enrollment over the past 25 years represents a major - probably the major - gain in equality of opportunity for low-income Nepalis. There are now schools in almost all areas of the Kingdom and in recent years the GON has sought specifically to stimulate and improve education in the remote areas, e.g., by offering 100 percent hardship allowances to attract teachers and by special teacher training programs aimed at these areas. Whether the educational opportunities can be translated into increased equality of income and other benefits depends on factors largely outside the educational sphere; but the increased access to education clearly not only represents a major gain in equal opportunity, it has also set in motion other forces that seem likely to produce greater equality in political and economic spheres as well.

F. On Nepalese Society and the Body Politic

Education is inherently a revolutionary force, as the Ranas understood in suppressing it for as long as they could. A few primary school students become secondary school students; a few of these become university students, and out of these a new leadership has arisen to challenge the existing order and the existing inequalities. They have organized; they march; they demonstrate; they strike; they make headlines; they even study. Though their long lists of demands may seem naive and immature in some respects, they clearly reflect an awareness of fundamental democratic concepts. Last year's national referendum, the first of its kind in Nepal, was brought about by the students; and though the panchayat system prevailed over the multi-party proposal, of greater significance is the fact that the issue was even brought to a vote. Social, political and economic change are the ultimate consequences of education, and one hopes that the fact that education in Nepal has been in the democratic tradition means that the changes, when they come, will be in that direction also. If they are, this will be the ultimate contribution of AID's support to education in Nepal.

V. INSTITUTIONALIZATION: ARE THE GAINS SUSTAINABLE?

To what extent has the GON proved capable of maintaining and building on the progress achieved to date? Is the educational system that was built with heavy AID support a flimsy structure that has begun to deteriorate without continued substantial assistance, or has the GON been able to continue it without major reliance on outside assistance? These questions are particularly pertinent to U.S. aid policy toward Nepal, given the major-donor role that AID played during 1954-75 in education and given the withdrawal of significant aid to the sector in recent years. The question has two parts: financial and human resource/institutional.

A. Financial Capabilities

Although in the early years U.S. aid represented a significant percentage of the MOE budget, the GON has clearly demonstrated the

capacity to carry the overall effort forward financially without continuation of this support. Comprehensive U.S. support declined during the 1968-72 period; yet MOE expenditures for education have increased during and since then at an average annual rate of over 18 percent (see Table 2). To some extent these and other expenditure increases have been financed by higher levels of foreign grants and borrowing (not necessarily earmarked for education); but tax revenues have also nearly tripled from 1972/3 to 1978/9. 14/ Although it seems unlikely that the GON can maintain the past rate of increased expenditures without substantially more external aid, clearly the GON has been able to enlarge expenditures for education despite the loss of significant levels of U.S. aid. However, the rate of expansion has slowed considerably since 1975/6, and future gains will probably depend either on increased aid or on hard decisions to increase the education budget (which is somewhat low at 1.5 percent of GDP and around 10 percent of the total budget) at the expense of other vital sectors such as agriculture and health.

B. Institutional and Human Resource Capabilities

The scope of this study did not permit detailed analysis of MOE capabilities, and judgments here must be tentative. We have already pointed to certain indicators of possibly declining educational quality, such as increasing pupil/teacher ratios and percentage of untrained teachers. One (U.S.-educated) official felt, in addition, that the discontinuance of most U.S. participant training for education was weakening the MOE, since the Ministry needed a continued infusion of training to keep up with contemporary theory and practice and since there was attrition of U.S.-trained personnel in the MOE as some people (often the best) moved to other jobs outside the Ministry. However, data on returned participants (through FY 75) indicate only about a 13 percent loss (40 of 300), and although some continuing outside training in the U.S. and elsewhere certainly seems necessary for the foreseeable future, our overall impression, peering through a glass darkly, is one of slow qualitative improvement in the education system. In particular, though the gap between policy articulation and implementation continues to be a serious problem, we are impressed with growing evidence of Nepali capacity to diagnose its own educational problems and devise appropriate remedies. The NESP, and the changes now being made in NESP policies, are examples of this capacity. Increasingly sophisticated and results-oriented research is being done in Nepal, by private consulting firms and by the Center for Educational Research, Innovation and Development (CERID) within Tribhuwan University. Leadership positions are being assumed by progressive and well-trained individuals, many of them former AID participants. On the negative side, periodic episodes of confrontation and turbulence on University campuses stemming from organized student protest activity are reducing discipline and lowering admissions and testing standards throughout the whole system. One cannot predict whether this will continue to erode educational progress. But apart from the effects that this unrest may have on the educational system if it continues unabated, we feel that the basic human and institutional resource capabilities exist on which to build.

VI. LESSONS LEARNED AND IMPLICATIONS FOR POLICY

1. AID's assistance to education in Nepal demonstrates the level of impact the U.S. can achieve on a sector given a sufficient quantity and duration of funding and technical assistance. Nepal, like many other developing countries, placed high emphasis on educating its people when initiating its development program. USAID responded with a level of assistance sufficient to assure a reasonable chance for success. The results, although not all that had been planned or hoped for, show that U.S. assistance in education can help produce a reasonably effective national program. A key factor in this accomplishment was the commitment of sufficient funding over a relatively long period of time, together with the ability to provide substantial financing of local costs.

2. Resource transfers are only part of the story, however. Particularly in countries as poor as Nepal, there is an equally urgent need to find more efficient and cost-effective approaches to development problems. The high cost of the traditional teacher training system that was installed, in contrast with the major savings to be realized if the radio training program currently underway proves effective, illustrates the importance of maintaining within AID the capacity to develop and experiment with innovative programs. To be effective these require a blending of "topdown" state-of-the-art knowledge with a solid understanding of individual country situations.

3. The lessons to be learned from the failure of the vocational education element of the program are not new, but bear repetition. The risks of failure in this difficult area will be reduced to the extent that programs (a) begin vocational training after 4-6 years rather than 8-10 years of initial education; (b) are as closely related as possible to "hands-on" apprenticeship situations; and (c) are seen as leading and do in fact lead to specific employment opportunities in the selected vocation. Formal education systems often do not handle vocational training well, and maximum reliance on the private sector or other prospective employers and on non-formal training should be sought as alternatives.

4. If the findings of this evaluation have any validity, basic education is a crucial element in the "seamless web" of development priorities. 15/ More research needs to be done on the minimum amount of education needed to attain and retain basic literacy and numeracy, but it would appear to be in the range of 4-6 years. This amount of education, even when as uneven in quality as in Nepal, has important effects in: increasing agricultural productivity; influencing the desire for smaller families; shaping values, attitudes and aspirations conducive to overall development; positively influencing the role and status of women; increasing equality of opportunity; affecting the political values and system of government that a nation chooses; and broadening participation in that system. Given the influence of basic education in these crucial areas, it seems highly inadvisable for AID to let atrophy its involvement in basic education or its capacity to bring the best available talent in the U.S. to bear on this sector. Although there are many countries

where AID's influence and impact on the formal system will be marginal, the Nepal experience illustrates that in other cases AID's involvement can be of great importance. AID needs to work continually to upgrade the quality of existing personnel and programs, and should concentrate on areas of comparative advantage such as the application of new and improved technologies, non-formal and low-cost approaches, and programs of maximum practical relevance to maximum numbers of people. But AID will not be able to bring these approaches to bear on LDC problems adequately unless it continues to maintain the capacity to attract talented staff and the interest of LDCs through continuation of a meaningful level of activity in basic education.

FOOTNOTES

1/ Statistics are highly unreliable in most relatively least developed countries (RLDCs), and Nepal is no exception. Let this footnote stand as a caveat to all numbers that follow in this report.

2/ HMG, Education in Nepal, Kathmandu: Bureau of Publications, College of Education, 1956, pp. 225-233.

3/ World Almanac, 1980, New York: Newspaper Enterprises Association, 1980, p. 184.

4/ This study, still in final draft, was done by the Center for Educational Research, Innovation and Development (CERID), Tribhuwan University, Kathmandu. The study measured the objectives of the grades 1-3 curriculum.

5/ UNICEF, "Literacy Retention Study: A Pilot Study of Literacy Skills of Primary School Graduates in Selected Areas of Kavre Palanchok District," Kathmandu: United Nation's Children Fund (submitted by New Era), August 1980.

6/ Huang, Y., et al., Nepal: Development Performance and Prospects, A World Bank Country Study, Washington, D.C.: December 1979.

7/ World Bank, "World Development Report, 1980," Washington, D.C.: August 1980, pp. 68-70.

8/ Jamison, Dean T., "Notes on Human Resources and Development in Nepal," Washington, D.C.: World Bank, October 1979 (revised June 1980), AT.4, Studies of the Effect of Education on Productivity in Nepalese Agriculture, pp. 57-59.

9/ World Bank, "World Development Report, 1980," op. cit., p. 53.

10/ Ibid., p. 56.

11/ Trace, Karen, "The Impact of Education on the Status of Women in Nepal: Observations and Intuition," USAID, Kathmandu, October 1980, p. 3.

12/ The value placed on education is not correlated positively or negatively with the level of education. Respect for education and knowledge has strong historical roots in Nepal due, in part, to the thousands of years during which only a tiny elite minority of priests and other powerful persons had any formal education. Both Buddhism and Hinduism, the two religions dominant in Nepal, regard knowledge as having connotations of virtue both through spiritual enlightenment and as an attribute of power. One writer feels this perception "...no doubt owes something to Tantric influence, which in Nepal has penetrated both Hinduism and Buddhism. In its more esoteric forms, Tantrism claims a body of occult knowledge capable of releasing great cosmic and psychic forces." (Source: Harris, George L., et al., Area Handbook for Nepal, Bhutan and Sikkim, sec. ed., Washington, D.C.: Foreign Area Studies Division, American University; Supt. of Docs., U.S. Govt. Printing Office, 1973.)

13/ See Table 8.7 p. 117 of Huang, Y., et al., Nepal: Development Performance and Prospects, ibid., Also see Table III, p. 7 and Map IV, p. 8 of UNESCO, "Nepal: Primary Education, A Sub-Sector Study," Report No. 60, Restricted EFM/94, Paris: October 1978.

14/ Huang, Y., et al., ibid., Table 5.1, p. 99.

15/ World Bank, "World Development Report, 1980," op. cit., pp. 68-70.

APPENDIX A

EVALUATION METHODOLOGY

The evaluation team consisted of three members, all AID/Washington staff: the team leader (Sellar), a program officer from the Near East Bureau whose academic background is in American history and literature with postgraduate work in economics and experience with sector analysis and project evaluations; an education officer (Sprague) whose background includes classical studies, a PHD in education, and high school teaching experience; and a program analyst (Miedema) with an MA in anthropology and six years' experience in Nepal with the Peace Corps, first as a volunteer teaching vocational agriculture (1967-69), then as Associate Director responsible for the education sector (1975-79). Together the team members have 35 years of AID and Peace Corps experience.

The USAID Mission in Nepal participated significantly in the evaluation, as indicated in the Acknowledgements section. In particular, Mr. Ram Chandra Shrestha, the USAID evaluation officer, spent virtually full time on the evaluation during the month we were in Nepal and coordinated other Mission and local contractor involvement and support, as well as participating substantively in all aspects of the evaluation except drafting of the report. He and Mr. Udaya Prakash Chhetri, another Nepali employee, did much of the research reflected in various tables of this report.

Time limitations, weather, terrain and transport dictated to some extent the evaluation methodology that was used. These limitations were partially redressed by the substantial amount of Mission and local contractor time and talent that was mobilized: at least seven person months of effort were expended during the one month of work in Nepal. This was possible because of strong Mission involvement and because of the availability in Kathmandu of expatriate and some local contract expertise in social science research.

The evaluation essentially fell into six stages: the pre-departure preparation phase (August 25-September 11 as time permitted); the planning and documentation review phase in Kathmandu (September 13-18); the field survey phase outside Kathmandu (September 19-28); interviews with key education personnel and other visits around Kathmandu (September 29-October 3); report writing and presentation to the Mission and Ministry of Educaton (October 4-9); and finalization of the report in AID/Washington. Review of relevant literature and project documentation continued throughout the first four stages, particularly during the evenings and weekends in Nepal, since there had been very limited pre-departure preparation time and few project documents were available in Washington. Nocturnal reading was often by candlelight since electricity was not working much of the time; fortunately our contingency fund was adequate to purchase the required number of candles! We had hoped that the field survey work and Kathmandu Valley interviewing might have been alternated at 2-3 day intervals so the team members might have more frequent interaction in the early research stages, but the difficulties of arranging dependable

transportation made this impossible. In retrospect, we do not think this mattered particularly.

Given the Mission's desire to participate and to involve local contractors in the evaluation, the main objective of the pre-departure phase was to develop and cable to the Mission, for comment and concurrence, as detailed a scope of work as possible and a preliminary work plan, so that as much preparatory work as possible could be done in Kathmandu before the AID/W team arrived. The objectives of the evaluation (as described in the last paragraph of page 1 of the report) were defined and agreed upon, and the basic work plan and schedule were laid out, though this required some modification after arrival in Nepal. Scopes of work were prepared and contracts signed between two local contractors and the Mission to participate in the field research before the AID/W team arrived, thereby enabling us to go right into action upon arrival.

The planning and literature review phase in Kathmandu consisted mainly of (1) making initial contacts, collecting and beginning to read the relevant documentation, (2) developing a detailed work plan and schedule, and (3) preparing the questionnaires to be used during the field survey. These latter two activities were carried out collaboratively with the involvement of the Mission and contract team members. The female members of the team were recruited and added to the survey team during this stage when it was decided (not without disagreement) that interviewing women in rural areas would require female interviewers. Three field survey teams were established, each composed of one AID/W team member, at least one Nepali, and at least one woman.

Field survey sites (see map on page viii) were selected with the intent of reaching as many different geographic and economic zones and ethnic groups as possible.

Three questionnaires (see Appendix B) were prepared, two for teachers and education officials to elicit information on how and how well the education system was working, and one for "ordinary" people of varying levels of education to measure the impact of education on their lives. These questionnaires were reviewed by USAID and contract personnel (U.S. and Nepali), but for lack of time were not field pretested nor were the interviewers trained to assure inter-rater reliability. The interviewees were not systematically selected as representative of different groups in the society, though an effort was made to seek distribution by geographic region, sex, age, and education level. Our purpose was to organize our time efficiently while gaining in a reasonably structured fashion impressions about the present status of primary education and its impact on people. Personal interviewees were selected randomly within the age, sex and education level parameters that were established; schools and school officials were selected randomly on the basis of accessibility and to maximize the number of visits/interviews within the geographic areas selected. While no claim for a statistically representative sample is made, the 124 interviews with teachers, district education officials and people on the farms and

in the villages and towns outside the Kathmandu Valley gave us a more realistic framework for evaluating the present status of primary education in Nepal. They also revealed how this group of people felt about education and its impact on their daily lives.

We tried to minimize the various biases so aptly described by Robert Chambers: urban bias; the showpiece project bias; the roadside bias; the personal contact biases (elite, male, active, users); the dry season bias; the synchronic bias (failure to discern trends); and the "professional beams" bias (overly specialized rather than holistic focus). 1/

We tried to minimize the urban and roadside biases by getting as far out into the rural areas as time permitted and by walking (or "trekking" as it is called in Nepal): one team actually went on a six-day, 50-mile trek in the hills over a route totally inaccessible to vehicles of any kind (even bicycles), and the other two teams went on treks of from half a day to two days at a time, in order to reach the poorest and most rural areas. Despite this effort we were only partly successful in getting away from well-travelled areas. Because the field surveys were done at the tail end of the rainy season (thereby avoiding the dry season bias) and the beginning of the tourist season, the teams were unable to reach the most remote and poorest areas of Nepal, especially to the west, because of the unreliability of scheduled or even charter aircraft and poor runway conditions. This was a major disappointment, although we feel fairly sure from eyewitness accounts of Peace Corps, voluntary agency personnel, and others who had been to these areas recently that our findings were not seriously skewed by this problem. But we would like to have seen for ourselves.

We tried to minimize the other biases mentioned above in various ways. We made Chambers' article available to all team members and discussed its contents before starting field work. We were completely successful in avoiding the "Potemkin village" bias by arriving at schools and in towns unannounced. (A few school headmasters and teachers were discomfited when they arrived at school around 11 a.m., to discover we had been waiting for them since the official opening time, 10 a.m. Others were on time and hard at work when we arrived.) For personal interviews we reduced the male and elite biases by ensuring that about half those interviewed were women and of varying educational levels. The distribution of questionnaires was as follows:

1/ Chambers, Robert, "Rural Development Tourism: Poverty Unperceived," Brighton (UK): Institute of Development Studies, University of Sussex, December 1979.

Distribution of Personal Questionnaires

Years of School

No School	16
Primary (1-3 years)	11
Lower secondary (4-7)	14
Upper Secondary (8-10)	13
More than ten years	11
TOTAL	65

Age

10-29 years	38
30-49 years	17
50+ years	10
TOTAL	65

Sex

Female	31
Male	34
TOTAL	65

Distribution of Teacher Questionnaires

Male	29
Female	14
TOTAL	43

Number of Supervisor Questionnaires

TOTAL 16

All teams had Nepali language capability; one team (Biratnagar area) conducted interviews in four local languages. We arrived in a low key way, generally walking, and spent time in unstructured sessions listening and learning, day and night, in addition to trying to make the questionnaires as open-ended as possible. Inevitably, however, there was some bias: the Nepali team members were from elite castes and/or backgrounds; the female team members were subjects of especially strong curiosity and emotion (both positive and negative) because they were travelling with men to whom they were not married; and we could not interview the sick (though we saw much illness around us and several funeral processions) or those who wished to avoid Westerners. And the responses to certain questions seem so contrary to other data as to suggest that to some extent we were being told what the interviewee

thought we wanted to hear (the "here comes another group of family planning propagandists" syndrome). For the most part, however, we feel we got reasonably accurate information.

After the field survey, the teams reassembled in Kathmandu, exchanged impressions and findings, and wrote these up in case the 124 interviews could not be formally tabulated and analyzed in time for use in drafting the report, which was to begin only six days later (October 4). While the teams were in the field, the Mission had arranged for an expatriate social scientist (Dr. Vivian Green) to tabulate and analyze the interviews, so work on this began immediately. Messrs. Shrestha and Chhetri concentrated on pulling together the participant training and financial information reflected in Appendices E and F and Tables 2-4, research that was ultimately successful but was hampered by gaps in project records and the inability to gain access to data at the Ministry of Finance. Meanwhile the AID/W team members moved into phase three: interviews and site visits in the Kathmandu Valley. Interviews were held with as many key people as time permitted, both in and outside the MOE and Tribhuwan University. An effort was made to meet with other donor and Peace Corps personnel, and to talk to knowledgeable people on both sides of the issues surrounding the NESP. No questionnaires were used in these interviews; lists of questions were prepared in advance for each interview depending on the interviewee, and open-ended questions were used to elicit information and views. The AID/W team members conducted these visits and interviews sometimes as a group, sometimes individually or in pairs, sometimes with Ram Chandra Shrestha, depending on scheduling exigencies and on team members' respective areas of particular interest and report writing responsibilities. The AID/W team members had divided up drafting responsibilities about equally, shortly after returning from the field. As a general policy, team members went to as many interviews as possible because it improved the quality of discourse to have more than one interviewer, and gave each team member a better understanding of the total situation. Perhaps in part because of this approach, when the first draft report was completed during October 4-6 it came together quite well despite having been drafted by three authors, and required only one additional day of intensive editing to produce a draft acceptable for presentation on October 7 to the MOE and the USAID. On October 8 the team met with MOE staff, who had clearly studied the draft very carefully and took issue with only a couple of points. The same was true of the USAID Director, with whom the report was reviewed the next day. The team left Nepal on October 10 and finalized the report in AID/Washington.

APPENDIX B

ANALYSIS OF QUESTIONNAIRES

Questionnaires were administered to a total of 124 interviewees (see Appendix A for distribution breakdown) from September 19-28. Although the three separate questionnaires were not field pre-tested, it was agreed among team members that they would not be altered once in the field, so that the responses recorded by the three survey teams would be comparable upon return to Kathmandu. The field survey teams went to those three areas indicated on the map (page viii), and each team used all three of the questionnaires, depending in each individual case on the status of the informant. On return to Kathmandu, the completed questionnaires were tabulated and analyzed by Dr. Vivian Green, and this appendix is the result of her work.

The non-cognitive characteristics discussed in the section of the main report entitled "On Peoples' Attitudes and Behavior" were measured through the personal questionnaire that follows. The chart on page B-2 (next page) summarizes the interpretation of the questionnaire findings with respect to these factors. Questions were analyzed for sex and age distribution as well as education level, but the sex and age analyses are excluded to reduce the length of this appendix. Anyone interested in these may obtain them from the education impact evaluations coordinator (currently Marion Kohashi) in A.I.D.'s Office of Evaluation, Studies Division (PPC/E/S).

NON-COGNITIVE FACTORS

Factors	Questions	Degree of Correlation with Education Level	No. of Questions With Positive Correlation
Dissatisfaction with status quo	B 5 (satisfaction with health care)	None	0 of 3
	C 6a (satisfaction with work)	None	
	E 14 (satisfaction with schooling)	Insufficent responses	
Willingness to take risks, try changes	C 7(1) (Have you tried changes in farming?)	General Correlation	1 of 1
Aspirations: static or dynamic	D 10 (What want sons/daughters do when grow up?)	Clear Correlation	1 of 1
Feelings of fatalism vs control over one's fate	D 10 b (If won't achieve hopes, why not?)	Good Correlation	1 of 1
Broader perspective, greater involvement and awareness (both sexes)	E 13 (What learned in school of value?)	Strong Correlation)	
	F 17 (Work in social organizations)	Only 14% yes answers, but) a correlation)	3 of 3
	F 19 (Reading book and newspapers)	Strong Correlation)	
Same, for women only	G 21 (Can unmarried women inherit property?)	No Correlation)	
	G 22 (Can men have more than two wives?)	No Correlation)	0 of 3
	G 23 (Knowledge of family planning)	No Correlation)	
Receptivity to change, new ideas	E 15 (Attitude toward women teachers)	Some Correlation	
	E 16 (Sending daughters to school)	Big leap at certificate+ level	3 of 3
(Women only)	F 23 (Practicing family planning)	Strong Correlation	
		TOTAL POSITIVE CORRELATION	9 of 15

RESULTS OF QUESTIONNAIRE FOR SCHOOL LEAVERS/GRADUATES AND THEIR PARENTS

This "personal" questionnaire was designed to measure the impact of education on people's lives. It was administered to 65 individuals although the number of responses to each question does not always total 65, since answers were not given or perhaps not recorded for every question. Most responses are analyzed by sex, age, and level of education. For ease in reading, questions are presented in boldface type; tabulations and comments are in standard type.

Village
District
Name of Informant
Caste/Tribe
Sex
Age
Marital Status
Years of Schooling

A. General

A. 1. How long have you lived in this village?

Education	Years	Number of Answers
No Schooling	33	14
Primary	25	11
Lower Secondary	27	14
Upper Secondary	16	13
Certificate+	19	11
Total:	24	63

A. 2. Do you/does your family own the house you live in?

Education	% Yes	Number of Answers
No Schooling	88	16
Primary	100	11
Lower Secondary	86	14
Upper Secondary	77	13
Certificate+	82	11
Total:	86	65

A. 3. How many people live with you?

Education	People	Number of Answers
No Schooling	8	16
Primary	6	11
Lower Secondary	8	14
Upper Secondary	10	13
Certificate+	7	11
Total:	8	65

A. 3. a. How are they related to you? (Not analysed.)

A. 3. b. What are their ages? (Not analysed.)

A. 3. c. Do you have any brothers/sisters (sons/daughters) who are living somewhere else?

Education	%Yes	Number of Answers
No Schooling	56	16
Primary	30	10
Lower Secondary	33	12
Upper Secondary	36	11
Certificate+	90	10
Total:	49	59

A. 3. c. (con't) If so, what are they doing and where? (Not analysed.)

B. HEALTH

B. 4. Who treats you when you are sick?

Total
The informants generally visited a hospital (about 2 out of 5). The health post and private treatment were the next most visited (both with 1/5 each). The remaining 1/5 used a Jhankre (shaman) (1/10) or remained at home (1/10).

Schooling
All, except for the certificate+ category, visited the hospital most. The certificate+ informants preferred the doctor or private clinic. Both the certificate+ and the secondary categories did not see Jhankres. Those with no schooling did not visit a health post.

B. 5. Are you satisfied with the medical care available to you?

Education	%Yes	Number of Answers
No Schooling	47	15
Primary	45	11
Lower Secondary	38	13
Upper Secondary	46	13
Certificate+	73	11
Total:	50	63

B. 5. a. If not, what's wrong with it? (medical care)

Total
The informants believed that the most important problem was the availability of treatment, i.e., no beds/seats, overcrowded facilities, and distance necessary to travel (about 1/4). The remaining 3/4 were equally divided between cost of medicine, quality of treatment, cost of treatment, availability of medicine, quality of medicine, and corruption/administration (in that order).

Schooling
Those with no schooling thought that the cost of treatment was the most important problem. Those with lower secondary education thought that the cost of medicine was the most important problem.

B. 5. b. What should be done to improve it? (medical care)

Total
In total the informants most often believed that better provision of medicines (both in terms of availability and quality) and free, or at least cheaper, treatment and medicines were more needed. Together these two improvements amounted to 3/5 of the responses, with both of equal importance. The need for expanded services was 1/5 of the total, with the remaining 1/5 allotted to quality improvements (staff and doctor), building improvements, and "don't knows" (in that order).

Schooling
Those with secondary education placed the most emphasis on the quality of medical services (2/5) followed by the cost (1/4). Those with certificate+ education placed the most emphasis on the expansion of services (1/2).

C. Work

C. 6. What kind of work do you do?

Total

farming	35%
housework	15%
business	15%
unskilled	10%
student	10%
skilled/semi-professional	5%
government worker	5%
teacher	5%
	100%

Sex
Though in total farming and housework could be considered as one category, it must be noted that females responded that their work was 30% housework and 30% farming while the males responded only in terms of farming (40%).

Schooling
There was a fairly consistent increase (from no schooling through to certificate+) in the number of skilled laborers, government employees, and professionals. In secondary and certificate+ categories there was a definite drop-off in the number of those whose work was farming. The most significant deviation was with the secondary education category where only 8% were in farming as opposed to an average of 60% in the first 3 categories and 40% in the certificate+ category.

C. 6. a. Do you find it (your work) satisfactory? If not, why not?

Education	% Yes	Number of Answers
No Schooling	69	16
Primary	100	11
Lower Secondary	92	13
Upper Secondary	73	11
Certificate+	86	7
Total:	83	58

Total

One-half of the total informants complained of their work in terms of lacking income. One-fourth of the total informants felt their work was hard on the body. One-fourth of the informants complained that their work did not match up to their qualifications. One-third of the informants complained of no progress.

Schooling

There is insufficient data to make any definite conclusions, although it can be inferred that those who had obtained secondary and certificate+ education articulated their complaints in non-physical, non-monetary terms, particularly pertaining to expectations. Those with no schooling particularly emphasized the bodily pain.

C. 6. b. (1) Do you do any work in addition to your regular job?

Education	% Yes	Number of Answers
No Schooling	23	13
Primary	40	10
Lower Secondary	58	12
Upper Secondary	25	12
Certificate+	25	8
Total:	35	55

C. 6. b. (2) If so, what?

Total

farming	40%	) Only 1 response of 37 reported skilled
unskilled labor	30%	) labor; he was in the 10-29 years category.
housework	20%	
business	10%	
	100%	

Education

The amount of "unskilled labor" responses decreased from least to most schooling:

Unskilled labor	
No Schooling	60%
Primary	60%
Lower Secondary	33%
Upper Secondary	0%
Certificate+	25%

The amount of "farming" responses increased from no schooling to certificate+ education:

	Farming
No Schooling	20%
Primary	30%
Lower Secondary	33%
Upper Secondary	40%
Certificate+	50%

"Business" was not a response in either the no schooling or primary categories while some increase can be noticed in the last three categories.

	Business
No Schooling	--
Primary	--
Lower Secondary	10%
Upper Secondary	30%
Certificate+	25%

C. 7. (1) (For farmers) **Have you changed the way of your farming in the last few years?**

Education	% Yes	Number of Answers
No Schooling	56	14
Primary	29	7
Lower Secondary	82	11
Upper Secondary	83	6
Certificate+	80	5
Total:	58	43

C. 7. (2) If so, how?

Total	
fertilizer	40%
improved seeds	40%
new crops	15%
new methods	5%
	100%

Schooling

Half the respondents above primary category had a distinct advantage over the rest in changing agricultural behavior.

C. 7. a. Where did you get the idea (for the change in your farming)?

Total		
from:		
an institution	60%	
others	30%	
school		(1/28 responses)
radio	10%	
	100%	

Schooling
There was no noticeable correlation between source of idea and level of education.

C. 7. b. Are you pleased with the change (in your farming)?

Education	%Yes	Number of Answers
No Schooling	80	5
Primary	100	3
Lower Secondary	100	8
Upper Secondary	100	5
Certificate+	100	4
Total:	96	25

C. 7. c. If not, will you try other changes (in farming) again?

Education	%Yes	Number of Answers
No Schooling	100	1
Primary	0	1
Lower Secondary	100	1
Upper Secondary	0	1
Certificate+	--	0
Total:	50	4

D. FAMILY

D. 8. How many children do you have?

Education	Children	Number of Answers
No Schooling	4	16
Primary	3	9
Lower Secondary	2	11
Upper Secondary	1	9
Certificate+	2	8
Total:	3	53

D. 9. How many (more) children would you like to have?

Education	Children	Number of Answers
No Schooling	0	12
Primary	0	9
Lower Secondary	1	8
Upper Secondary	1	7
Certificate+	1	8
Total:	1	44

D. 10. What would you like your sons/daughters to be when they grow up?

Total

	Sons	
Professional	12	The hopes for sons were specifically directed in terms of professionalism.
Educated	3	
Technical	2	
"The best"	1	

	Daughters	
Marriage	4	Marriage is the key here with education fast catching.
Educated	3	
Professional	2	
Teacher	1	
"The best"	1	

	Children	
Educated	24	Education in general was the hope for children, followed by the hope for them to be professionals.
Professional	12	
Government Worker	6	
"The best"	4	
Teacher	3	
Technical	3	

Education

Expectations for sons differed between those of little or no schooling and those with more. In the no schooling and primary education categories the most frequent response was the hope for education while in the lower secondary, upper secondary and certificate+ categories the most frequent response was the hope for a professional career. The secondary education category was the only place where professionalism was the hope for daughters. Certificate+ informants placed the highest percentage emphasis on professionalism for their children.

D. 10. a. Do you think your child will be able to achieve this?

Education	% Yes	Number of Answers
No schooling	64	11
Primary	100	5
Lower Secondary	71	7
Upper Secondary	67	6
Certificate+	60	5
Total:	71	34

D. 10. b. If you don't think your sons/daughters will be able to achieve your hopes, why not?

Total

Note: Only a few of the respondents firmly believed that there was possibility for achievement and so the responses take the form of a constraint.

dependent on money	45%
dependent on aptitude	20%
up to them	20%
dependent on luck/on God	15%
	100%

Schooling
Only in the no schooling category did the respondents feel that luck and God were important factors (25%).

E. EDUCATION

E. 11. Where did you go to school? (Not analysed.)

E. 11. a. For how many years (did you go to school)?

Education	Years	Number of Answers
No schooling	0	16
Primary	3	11
Lower Secondary	5	14
Upper Secondary	8	12
Certificate+	11	3
Total:	7	61

E. 11. b. When? (How many years ago did you go to school?)

Education	Years	Number of Answers
No schooling	0	0
Primary	15	7
Lower Secondary	11	[illegible]
Upper Secondary	9	8
Certificate+	10	8
Total:	11	37

E. 11. c. Why did you not continue in school longer?

Total	
Economic reasons	60%
Distance/access	20%
Marriage	10%
Still in school	5%
Education sufficient	5%
	100%

Schooling
Those "still in school" were only in the primary, lower secondary, and upper secondary categories. In the certificate+ category economic reasons were less reported (30%) while they were the only respondents who said that they had had sufficient education (30%). "Marriage" as a response was reported only in the lower secondary, upper secondary, and certificate+ categories.

Marriage	
Lower Secondary	10%
Secondary	10%
Certificate+	30%

E. 12. Do you earn more money because you went to school?

Education	% Yes	Number of Answers
No schooling	0	1
Primary	33	6
Lower Secondary	25	12
Upper Secondary	64	11
Certificate+	44	9
Total:	41	39

E. 13. Apart from money, what did you learn in school that was of value to you?

Total	
Basic skills	45%
More awareness/broader perspective	40%
Nothing	10%
Technical	5%
Social prestige	0+%
	100%

Schooling	Basic Skills	Awareness/Perspective
No schooling	--	--
Primary	60	10
Lower Secondary	65	25
Upper Secondary	40	40
Certificate+	10	80

The number of respondents citing "awareness" is proportional to the level of education attained. Whereas the number of respondents citing "basic skills" is inversely proportional to the level of education attained. Those with primary education only responded "nothing" with a frequency of 30%.

E. 14. In what ways are you not satisfied with your schooling?

Total
Two problems received most attention: that the physical condition of the school was poor (31%) and that the respondent could not continue (31%). Also remarked were the poor teaching and educational facilities (25%).

Education
Insufficient data. Note, however, that the bulk of respondents who regretted being unable to continue fell in the primary educated group. Comments on the physical state of the school were confined to the upper educated levels.

E. 15. What do you think about women teachers?

Total
The overall consensus was favorable to the idea of women as teachers with 44% of the sample expressing unspecified support. 21% of the sample

recognized the propriety of women teachers in encouraging and catering to the special needs of female students, while a further 18% claimed women teachers are better than men. A small group (7%) said it was good for women to work outside the home, while the remaining 10% expressed no opinion.

Education
Unqualified support is broadly distributed across education levels. However, only the upper educated noted that female teachers could cater better to girls' needs; and as education increases, the tendency to express "no opinion" decreases. Recognition that women should work outside the home is centered in the lowest educated group and decreases with education. The opinion that women are better teachers is centered in the middle level group.

E. 16. Do your daughters go to school?

Education	% Yes	Number of Answers
No schooling	64	14
Primary	20	5
Lower Secondary	0	6
Upper Secondary	17	6
Certificate+	86	7
Total:	45	38

If not, why not?

Total
In the majority of cases (39%) the female children were too young. Other, avoidable reasons for non-attendance were broadly equal in distribution: the child had to work (22%); there were insufficient funds (22%); and the school was too far away (17%).

Education
As the level of education increases the non-attendance of respondent's daughters decreases; the lower educated have a higher incidence of non-attendant daughters.

F. INVOLVEMENT/AWARENESS

F. 17. Do you work in any social organization? If so, which one(s)? In what capacity?

Education	% Yes	Number of Answers
No schooling	6	16
Primary	12	8
Lower Secondary	15	13
Upper Secondary	22	9
Certificate+	20	20
Total:	14	56

If so, which one(s)?

Total
Principal involvement was with the Panchayat (33%) and the school committee. Other organizations mentioned were the farmer's cooperative, the cooperative society, the former "Back-to-the-Village-Campaign," and a military organization (each 8%).

Education
Involvement seems to increase with education, with secondary and certificate educated subjects as members in more organizations. With only one exception (a farmer's cooperative president, 30-49 group, certificate educated), all respondents are listed as "members." We are, therefore, unable to establish correlations between education and type of involvement.

F. 18. Do you listen to the radio? If so, what are your favorite programs?

Total
The most popular category of program is found to be agriculture:

Agriculture	25%
All	21%
Music	19%
Education	16%
News	9%
Family Planning	5%
Other	5%
	100%

We should mark the low popularity of family planning programs.

Education
Interest in educational and agricultural programs increases with the level of education. Interest in family planning is found to decrease with higher education. Interest in news is broadly static, and confined to those of intermediate education. Those with no education favored music programs; primary educated favored news, or did not discriminate; lower and upper secondary educated had broadly even interest; certificate educated recorded no interest in music, family planning, or news.

F. 19. Do you ever read books or newspapers?

Educated	% Yes	Number of Answers
No schooling	20	15
Primary	22	9
Lower Secondary	57	14
Upper Secondary	92	13
Certificate+	100	10
	57	61

G. FOR WOMEN ONLY

G. 20. Do you speak Nepali?

Education	% Yes	Number of Answers
No schooling	92	12
Primary	100	6
Lower Secondary	100	5
Upper Secondary	100	2
Certificate+	100	6
Total:	97	31

Do you read Nepali?

Education	% Yes	Number of Answers
No schooling	0	10
Primary	80	5
Lower Secondary	100	4
Upper Secondary	100	2
Certificate+	100	4
Total:	56	25

G. 21. If a woman is over 35 years and not married, can she inherit property from her father? (The answer is yes according to modern Nepali law but traditional thinking would presumably call for a negative response.)

Education	% Yes	Number of Answers
No schooling	90	10
Primary	100	6
Lower Secondary	100	3
Upper Secondary	50	2
Certificate+	100	5
Total:	92	26

G. 22. Can a man have two wives at the same time? (According to modern Nepali law a man cannot have more than one wife at a time.)

Education	% Yes	Number of Answers
No schooling	60	10
Primary	83	6
Lower Secondary	60	5
Upper Secondary	100	2
Certificate+	33	6
Total:	62	29

G. 23. Do you know about family planning? (part one)

Education	% Yes	Number of Answers
No schooling	80	10
Primary	100	5
Lower Secondary	80	5
Upper Secondary	50	2
Certificate+	100	4
Total:	85	26

G. 23. If you know about family planning, do you or have you ever practiced it? (part two) (Part two of this question was asked only of married women who answered yes to part one.)

Education	% Yes	Number of Answers
No schooling	50	8
Primary	75	4
Lower Secondary	75	4
Upper Secondary	0	0
Certificate+	100	2
Total:	67	18

RESULTS OF QUESTIONNAIRE FOR DISTRICT EDUCATION OFFICERS/PRIMARY SCHOOL SUPERVISORS

This questionnaire was administered to 16 education officials in six districts.

A. ORGANIZATION

A. 1. When was the district education office established?

Average number of years ago	10
Number of Answers	14

A. 2. How does your education office work in relation to the regional and/or national office?

Most supervisors reported that they deal directly and work closely with the regional office. That office is responsible for controlling, supervising, implementing policies, mediating, and opening new schools.

The national office makes decisions and establishes policies. It determines education plans, curricula, content of SLC exams, and also provides funds. In general, the regional office coordinates with the national office; district offices rarely deal directly with the national office.

B. SCHOOLS

B. 3. How many primary schools are there in your district?

Average number of primary schools	166
Number of Answers	16

B. 4. Are there enough primary schools both for classes 1 to 3 and classes 4 and 5 for all the school-aged children?

	% Yes	Number of Answers
Classes 1-3	25	16
Classes 4-5	6	16

B. 5. Are there remote villages in this district without schools?

Percentage Yes	50
Number of Answers	16

B. 6. How is a primary school started? Who pays for the construction? maintenance? community support?

Applications for new schools come from the community at the Panchayat level. The quotas come down from the Ministry of Education to the Regional Offices

to the District Education Offices. Decisions about which schools will open are made at the district level by the District Education Committee and the District Education Office.

The land, building, and labor are all donated by the community. Maintenance is also provided by the local people. The community donates furniture and in a few cases a share of the teachers' salaries. One locality reported that community support is down because control of the school is now in the hands of the government.

C. TEACHERS

C. 7. Do you have enough teachers for your primary schools?

Percentage Yes	31
Number of Answers	16

C. 8. What kinds of in-service training programs for teachers do you have in the district?

Close to one-half of the respondents said there was currently no training at the district level. When there is such training, evidently it is primarily of two kinds. One is on-the-spot with instructors coming from Kathmandu. Another is in-service, both short- and long-term, at one of the regional teacher training campuses. The constraint with the latter is deciding how to allocate the quota which is considered to be quite low.

C. 9. Has this (in-service) **training improved their teaching ability?**

Percentage Yes	69
Number of Answers	16

C. 10. How long do teachers normally stay in the district?

Answers to this question were given as a composite of information concerning the teachers' places of origin and the lengths of stay, seen as conditional upon that. Hence, we find that basically between 50% and 75% of teachers are local people, and when that is the case, they may be regarded as permanent. Non-local teachers are expected to leave, but after an unspecified period of time.

C. 11. How do you find teachers?

The most common way of finding teachers is to advertise, usually in the newspaper but sometimes on the radio or through the Public Service Commission. One respondent had gone to India to find teachers. Another community which is remote finds its own teachers. Responses vary from this advertising approach -- from no reply to teachers simply coming around looking for work. The applicants are usually interviewed and their qualifications checked.

C. 12. Who hires the primary school teachers?

A temporary teacher can be hired by the District Education Office, but a permanent one must go through the Public Service Commission.

C. 13. a. **Who pays them?** (primary school teachers)

His Majesty's Government pays the salaries through the Ministry of Education down to the district level. In one or two cases a temporary teacher or a teacher hired by a locally financed school was paid by the community. There is a sliding scale with government providing the following shares at each level:

Primary	100%
Lower Secondary	75%
Upper Secondary	50%

The amount paid depends on education and training:

Less than School Leaving Certificate	Rs. 185 per month
Less Than School Leaving Certificate plus training	230 per month
School Leaving Certificate	255 per month
School Leaving Certificate plus training	290 per month

C. 13. b. **How much?** (are the primary school teachers paid)

Average amount paid	Rs. 698 ($58.30)
Number of Answers	9

D. MATERIALS

D. 14. Where do you get textbooks for the primary grades?

The textbooks come from the Ministry of Education through the Education Materials Centre in Kathmandu to the district level.

D. 15. Who pays for them (textbooks for primary grades)?

The textbooks are provided free by the government through the Ministry of Education (in two cases UNICEF or UNESCO was mentioned). Several schools reported the books were late in being distributed. The texts can also be bought in some bazaars. After class three the students must provide their own books.

D. 16. Do you get the curriculum guide, teachers' guides and other instructional materials?

Percentage Yes	69
Number of Answers	16

D. 17. Are there enough books for all the students?

Percentage Yes	94
Number of Answers	16

E. OTHER

E. 18. How do you supervise the primary schools?

Most supervisors visit the schools to observe classes, talk to the teachers and the local committee, and check school materials and physical facilities. Some supervisors said they could not visit often enough as each is responsible for up to 30 or 40 schools. The salary is said to be inadequate to cover even the cost of food while out of the office.

E. 19. How do you (primary supervisor) **spend most of your time?**

Supervisors spend from 21 to 25 days each month in the field and from 2 to 5 days at every school.

E. 20. Why do so many children drop out especially after the first grade? Are there different reasons for boys and girls?

The overwhelming reason for children dropping out of school is that they must work at home. Economically, parents cannot afford the cost of pencils, copybooks and clothes. There is some seasonal drop in attendance because of the importance of agriculture. The situation may not be as bad in the Terai and in bazaar areas.

Many people say the reasons for leaving school are the same for boys and girls. Others say that girls are needed more at home. Boys will take care of their parents in the parents' old age, but girls leave the family at marriage. Girls are a backward "caste" and may not go to school if the society in the village is not educated and therefore doesn't treat boys and girls equally.

E. 21. Do you think the changes brought about by the NESP have improved primary education?

Percentage Yes	88
Number of Answers	16

E. 22. a. Were you or anyone on your staff trained outside Nepal?

Percentage Yes	31
Number of Answers	16

E. 22. b. If so, (if you or anyone on your staff was trained outside Nepal), **where? How do you feel about the training?**

Not much training was done outside Nepal, but one informant per district reported someone going to Southern Illinois University, Iowa, University of Florida, the States, and Austria.

Reactions to the training varied from saying it was not relevant to the Nepal situation to saying it was good.

E. 23. What can be done to increase the number of female teachers and female students?

Circularly, for more female teachers, more female students are needed. And to draw more female students, more female teachers must be employed.

Giving priority to training and hiring female teachers will help. Increasing the number of girls' schools and hostels or making the training free for females is another possibility. The problem is particularly acute in rural or remote villages. Socially, women are not free to leave their hometown and go off by themselves to training in a big city or to work later in a remote area. Girls might be chosen from rural villages for training with the agreement that they will return to their villages. A higher salary and better facilities could be provided in remote areas. Some respondents say social change of this kind takes time but will come.

Copybooks, pencils, and textbooks could be given free to girl students. School fees might also be waived. Any economic support would be helpful as it is the lack of financial and labor resources that forces girls to drop out of school.

E. 24. How do you think primary education could be improved?

The most important way to improve primary education is to see that the teachers and supervisors are well trained. There are not enough teachers now and salaries need to be raised, especially in the remote areas.

Better physical facilities are definitely needed, in part so that the classrooms won't be so crowded. And more schools are also needed, as new applications exceed the quotas. The quality of the educational materials used in the classroom must be improved.

Support from the local community is essential. Several respondents suggested making school compulsory in reality instead of in law only.

E. 25. How do you think primary education makes a difference in the lives of the people in this district?

Being able to read and write is the biggest difference primary education makes in the lives of the people. Habits begin to change, particularly with regard to hygiene and doctors. People can "do accounts" and are much more receptive to information about health, agriculture, etc.

Quite important is that people begin to think for themselves and discuss things. Old customs are questioned and concepts and attitudes change. It becomes easier to be open and adjust to new ways.

Children who have a primary education may be encouraged to continue their studies. And when they become parents they will probably send their children to school. Education also improves the sense of status and reduces the possibility of exploitation and cheating by others.

RESULTS OF TEACHER/HEADMASTER QUESTIONNAIRE

This questionnaire was administered to 43 teachers and headmasters in six districts.

A. TRAINING/EXPERIENCE

A. 1. Have you received any training for teaching? If so, where?

	% Yes	Number of Answers
Female	85	14
Male	76	29
Total:	79	43

Teacher training has been undertaken in a number of different places, with a majority in Pokhara (8 respondents or 25%) and Palpa (6 or 20%). Other places include Dhankuta, Butwal, Kirtipur, Dharan, Biratnagar, Bhairawa, Benares and Patna.

Female training is evenly distributed over seven places, while male training is concentrated in Pokhara and Palpa and six other places named. Twice as many males received teacher training as females.

A. 2. Did your training help you become a better teacher?

	% Yes	Number of Answers
Female	85	14
Male	69	29
Total:	74	43

A. 3. a. How long have you been teaching?

	Average # of Years	Number of Answers
Female	8	14
Male	10	29
Total:	9	43

A. 3. b. How long (have you been teaching) **in this district?**

	Average # of Years	Number of Answers
Female	8	14
Male	9	29
Total:	8	43

A. 4. Are there in-service training programs available to you?

	% Yes	Number of Answers
Female	57	14
Male	67	27
Total:	63	41

B. MATERIALS

B. 5. Are there enough textbooks for your students?

	% Yes	Number of Answers
Female	100	14
Male	82	29
Total:	88	43

B. 6. Do you have any other materials such as teacher guides, posters, flip charts?

	% Yes	Number of Answers
Female	43	14
Male	59	29
Total:	53	43

B. 7. Do the students have copybooks and pencils?

	% Yes	Number of Answers
Female	50	14
Male	69	29
Total:	63	43

B. 8. a. Who pays for them and the textbooks? How much?

In the case of textbooks, the large majority of respondents reported that the Ministry of Education provided the books at no cost. In a very few cases, other agencies were responsible (D.E.O., UNICEF) and in six cases students themselves had to pay for the books.

In the case of copybooks and pencils, the students almost always must buy these. A small number of schools provide them, and a similar number said that the Ministry of Education made provisions.

There is no significant difference between male and female respondents.

B. 8. b. How much is paid for copybooks and pencils?

	Rupees	Number of Answers
Female	42	7
Male	114	8
Total:	81	15

C. METHODS

C. 9. How many students are usually in your class? boys/girls*

	Girls	Boys	Total	Number of Answers
Female	29	39	63	13
Male	14	28	45	29
Total:	17	28	50	42

*Different answers were given to this question. Some teachers responded in terms of attendance, others according to the roll books. In some cases it is believed that total figures were given with classes added together, since the numbers were so large. To counteract this upward bias, the median was used instead of the average. Thus the girls plus boys do not equal total in all three categories, but each individual figure is more reliable.

C. 10. Is there more than one class in your room at a time? If so, how do you handle this?

	% Yes	Number of Answers
Female	14	14
Male	10	29
Total:	12	43

The respondents were almost unanimous that no such problem exists. Where it did (four cases) two respondents assigned one class to chant or sing while the other was taught; one had erected partitions, and in one case the school building had actually collapsed, with all classes held outside. The four respondents were all male.

C. 11. Do all your students usually pass on to the next grade?

	% Yes	Number of Answers
Female	7	14
Male	10	29
Total:	9	43

C. 12. How do you know if the students learn what you have taught?

The two most popoular methods of evaluation are oral questioning (34 responses, approximately 50%) and periodic written examinations (27 or 39%), the latter varying in frequency from daily to quarterly. In some cases (7 or 10%) homework assignments were given, and two respondents judged only by the children's ability to read and write. In a fair number of instances, the first two methods were used together.

C. 13. Why do so many students drop out, especially at the end of class one?

A wide variety of reasons were given for this, with the necessity for children (especially girls) to work at home in the appropriate season as the main one (15 responses or 33%). Parental moves, with the resulting transfer of schools, was also a major factor (13). Other reasons given comprised lack of money (5), lack of student motivation (2), slow learning ability (2), poor tuition (1) and illness (1).

Only male respondents identified factors relating to learning or teaching. Four female respondents reported no such problem existed.

C. 14. Proportionally do a higher percentage of girls drop out? If so, why?

	% Yes	Number of Answers
Female	29	14
Male	24	29
Total:	26	43

The large majority (over 75%) identified no such problem. In the few positive-response cases, the need to work at home was offered as the main cause (7 responses), and that education was felt unnecessary for women a subsidiary one (3).

Only male respondents remarked that education was felt to be unnecessary for girls.

C. 15. How do you teach first grade students who don't speak Nepali?

The large majority of respondents (34 or over 80%) said there was no such problem for all children could speak Nepali. Where a problem was found, four respondents began by teaching in Nepali and four others used regional languages at first: Maithili (2), Magar (1) and Hindi (1).

D. CONTENT

D. 16. Are the lessons in the textbooks written in such a way as to interest the students?

	% Yes	Number of Answers
Female	100	14
Male	66	24
Total:	77	43

D. 17. Are the textbooks ever revised?

	% Yes	Number of Answers
Female	100	14
Male	90	29
Total:	93	43

E. TEACHING PROFESSION

E. 18. What do you like about teaching?

A wide variety of reasons were offered, the principal one being the enjoyment of interacting with children (7). After that, a sense of "duty" to the community service aspects of teaching was remarked (4), and that teaching was a good job for a woman (3). Other reasons comprised good salary (1), good holidays (1), opportunity for further study (1), good for religious reasons (dharma) (1), student's achievement (1), and the importance of the job (1).

Male respondents gave a wider selection of responses than females, especially relating to pragmatics of the job condition. Only women said teaching was a good job for a woman.

Since well over half of the sample gave no response, these conclusions must be seen as highly tentative.

E. 19. What don't you like about teaching?

The most unpopular factor was inadequate salary (9 respondents, approximately 70%), followed by the poor teaching facilities which prevail (7). Other causes for complaint included lack of public gratitude (4), bad treatment by the government (3), and parental pressure (3).

Male teachers gave more than twice as many responses as females, suggesting greater job dissatisfaction among men.

E. 20. Do you intend to continue teaching at the primary level?

	% Yes	Number of Answers
Female	100	13
Male	76	29
Total:	83	42

E. 21. Would you encourage one of your children to become a teacher?

	% Yes	Number of Answers
Female	40	5
Male	41	22
Total:	41	27

F. OTHER

F. 22. a. What can be done to increase the number of female students in primary school?

The large majority (22 respondents or about 70%) said it is necessary to talk to parents to encourage girl students. Other action suggested was to increase the number of female teachers (5), to create government pressure (4), and to offer financial aid (1).

Only males suggested increasing female teacher quotas as a method, otherwise no significant difference.

F. 22. b. What can be done to increase the number of female teachers in primary school?

A number of (roughly) equally-weighted responses were given; however, since well over half of the sample gave no answer, any conclusions drawn can only be tentative. Ideas offered comprised encouraging more students (3), preferential hiring policy for women (3), better education of women (3), offer more pay (2) and attempt to alter parental restrictiveness. There is, clearly, no consensus.

Almost twice as many male responses were given as female.

F. 23. Do you think it is important that everyone attend primary school?

	% Yes	Number of Answers
Female	100	14
Male	100	29
Total:	100	43

F. 24. How do you think primary education makes a difference in the lives of the people?

From a wide number of ideas most importance was attached to the provision of fundamental skills, basically those of reading and writing (17 responses). Next in importance was that primary educated people would be less vulnerable to cheating (8). Other effects identified comprised improved hygiene and health (5), the broadening of ideas (4), betterment of communication (4), increased employment potential (3), the betterment of subsequent generations' educations (2), and the potential for further study (1).

Proportionally speaking, female respondents gave greater weight to the acquisition of fundamental skills; male respondents favored the prevention of cheating and improved hygiene.

F. 25 Do you think parents pay enough attention to their children's education?

	% Yes	Number of Answers
Female	86	14
Male	69	29
Total:	74	43

F. 26. a. In what ways does the community support your school?

The most important support element was identified as building needs (in the form of the school building itself, the land, and voluntary labor for building and maintenance) (18 responses). Secondary, and roughly equal, responses were unspecified support (9) and provision of school furniture. Also named were money (4), and food (3). Three respondents claimed they had no community support at all.

Proportionally, more than twice as many male teachers identified community help with building requirements, otherwise no significant difference.

F. 26. b. Is this (community) support increasing or decreasing?

	% Increasing	Number of Answers
Female	67	12
Male	73	26
Total:	71	38

F. 27. Do you think primary education in Nepal has improved, gotten worse or stayed the same since you started teaching?

	% Improved	% Same	% Worse	Number of Answers
Female	72	7	21	14
Male	86	0	14	29
Total:	81	2	16	43

G. FOR THE HEADMASTER

G. 28. What are your problems in running this school?

The only factor prominently identified was the inadequacy of facilities (referring to educational materials and equipment needs) (8 respondents). Also important were factors relating to the school structure: too few rooms (4), rooms too small (4), the need for a completely new building (3), no peon (school servant) (2), too few pupils (1), lack of government support (1) and the increased difficulty of the curriculum (1).

Male respondents were more disposed to complain about the lack of facilities than female, and they also showed more emphasis on building requirements.

APPENDIX C

PERSONS CONTACTED

NATIONAL PLANNING COMMISSION (NPC)
- Dr. Mohan Man Sainju, Member, NPC, Kathmandu

MINISTRY OF EDUCATION (MOE)
- Mr. Tej Bahadur Prasai, Secretary, MOE, Kathmandu
- Mr. N. P. Rajbhandari, Joint Secretary, MOE, Kathmandu
- Mr. K. P. Nepal, Under Secretary, MOE, Kathmandu
- Mrs. Chandra K. Kiran, Director, Curriculum, Textbook and Supervision Development Centre, MOE, Kathmandu
- Mr. Gopi Nath Sharma, Regional Director of Education, MOE Pokhara
- Mr. Neer Mardan Basnett, Regional Director of Education, MOE, Dharan
- Mr. Rajbhansai Lal Karn, Assistant Regional Director of Education, MOE, Dharan
- Mr. Ramesh Kumar Rai, Planning Officer, Regional Directorate of Education, MOE, Dharan
- Mr. Harka Man Pradhan, DEO, Morang District, Biratnagar
- Mr. Basudev Khanal, DEO, Dhankuta District, Dhankuta
- Mr. Nagendra Prasad Singh, DEO, Sunsari District, Inerwah
- Mr. Dhundiraj Khanal, DEO, Palpa District, Tansen
- Mr. Jai Ram Giri, DEO, Kaski District, Pokhara
- Mr. Mohan Ghimire, Assistant DEO, Morang District, Biratnagar

PRIMARY SCHOOL SUPERVISORS (MOE)
- Mr. Phuspa Rajbhandari, Morang District, Biratnagar
- Mr. Luxman Choudhary, Morang District, Biratnagar
- Mr. Jagishwar Yadub, Morang District, Biratnagar
- Mr. K.N. Chowdary, Dhankuta District, Dhankuta
- Mr. Ramashish Thakur, Sunsari District, Inerwah
- Mr. Debi Prasad Bhattarai, Palpa District, Tansen
- Mr. Jagdish Aryal, Palpa District, Tansen

TRIBHUWAN UNIVERSITY
- Dr. Kedar Nath Shrestha, Dean, Institute of Education, Sano Thimi
- Dr. Prem Kasaju, Chief, Center for Education Research, Innovation and Development (CERID), Kathmandu
- Mr. Shiva Kumar Shrestha, Campus Chief, Dhankuta Multipurpose Campus, Dhankuta
- Mr. Narayan Joshi, Assistant Campus Chief, Dhankuta Multipurpose Campus, Dhankuta
- Mr. George John, Assistant Dean, IOE, Prithivi Narayan Campus, Pokhara
- Mr. Uttam Krishna Kharmacharya, Assistant Campus Chief, Prithivi Narayan Campus, Pokhara
- Mr. Ram Bahadur Sakya, Assistant Campus Chief, IEO, Butwal

JANAK EDUCATION MATERIALS CENTRE (JEMC)
Mr. Balkuntha Lall Shrestha, Chief Administrator, JEMC, Sano Thimi
Mr. D. C. Jha, Chief, Administrative Division, JEMC, Sano Thimi
Mr. Hari B. Dangol, Head, Press Division, JEMC, Sano Thimi

U.S. EMBASSY/NEPAL
Mr. Robert Goold, Political/Economic Officer, Kathmandu

STATE/WASHINGTON
Mr. Donald Paalberg, Nepal Desk Officer

USAID/NEPAL
Mr. Samuel H. Butterfield, Mission Director
Mr. Thomas L. Rose, Assistant Director
Mr. William B. Nance, Program Officer
Mr. William H. Douglass, General Development Officer
Mr. David E. Mutchler, Population Advisor
Ms. Laurier D. Mailloux, Behavioral Science Advisor

USAID/WASHINGTON
Mr. Kenneth L. Martin, Former USAID/Nepal Education Advisor
Mr. Howard Thomas, Desk Officer/Nepal
Ms. Regina Coleman, Assistant Desk Officer/Nepal

SOUTHERN ILLINOIS UNIVERSITY (SIU) CONTRACT TEAM/NEPAL
Dr. Donald Paige, Team Leader, Kathmandu
Mr. Jack W. Graham, Evaluation Officer, Kathmandu

PEACE CORPS/NEPAL
Mr. Mosaddi Mallick, Deputy Director, Kathmandu
Ms. Molly Tice, PCV, Ghandrung
Ms. Nancy Baughman, PCV, Bhairawa

NEW ERA/NEPAL
Mr. Bal Gopal Baidya, Director, Kathmandu
Dr. Mohammed Moshin, Consultant, Kathmandu

OTHER DONOR AGENCIES
Mr. Richard G. Abbott, Resident Representative, World Bank, Kathmandu
Dr. Allen B. Williams, Consultant, Education Program, UNICEF, Kathmandu
Dr. Jagadish Upadhyay, World Bank, Washington

In addition, a total of 124 questionnaire-based interviews were completed. Of these, 65 were interviews with village residents 16 with district level education officials (some named above), and 43 with headmasters and teachers.

APPENDIX D

SCHOOLS VISITED

MORANG DISTRICT

Primary (graden 1-3)

Satya Narayan Primary School, Biratnagar
Sri Janta Primary School, Angtola
Mahendra Primary School, Mangalbaday

Upper Secondary (graden 1-10)

Adarsha Vocational High School, Biratnagar

SUNSARI DISTRICT

Primary

Sunsari Primary School, Inerwah
Tribhuwan Primary School, Aratha Bunkulawa

DHANKUTA DISTRICT

Primary

Rastriya Saraswathi Primary School, Kachire
Sri Ganesh Primary School, Debrabas

Lower Secondary (grades 1-7)

Hile Middle School, Hile
Bharati Middle School, Hati Karka

Upper Secondary

Jalapa Devi Secondary School, Pakrabas
Gokundeshwari Vocational High School, Dhankuta

Campus

IOE, Dhankuta Multipurpose Campus, Dhankuta

KASKI DISTRICT

Primary

Sri Ram Primary School, Simal Chour
Sri Mahendra Primary School, Naudhanda
Sri Vijaya Primary School, Landruk

KASKI DISTRICT (Cont'd)

Lower Secondary

Biretbanti Lower Secondary School, Biretbanti
Prithivi Narayan Lower Secondary School, Dhampus

Upper Secondary

Menhram Baraha High School, Chandruk
Pokhara Multipurpose High School, Pokhara

Campus

IOE, Prithivi Narayan Campus, Pokhara

PALPA DISTRICT

Primary

Bhagawatisthan Primary School, Tansen
Prabhat Primary School, Bandi Pokhara
Gargi Primary School, Badarbot
Saraswathi Primary School, Madan Pokhara
Bir Primary School, Konbari

RUPENDEHI DISTRICT

Primary

Bhagwanpur Primary School, Bhagwanpur
Saraswathi Primary School, Butwal
Meudihawa Primary School, Meudihawa
Uma Primary School, Kunjalapur
Shree 5. I.R.L.P.K. Primary School, Siddhartha Nagar, Bhairawa

Lower Secondary

Gyanodaya Middle School, Butwal

Campus

IOE, Butwal Campus, Butwal

APPENDIX E

PARTICIPANT TRAINING IN EDUCATION
(1953–1975)

Year	U.S.		Third Country		India/Pakistan (Excess Rupees)	
	Long-term*	Short-term	Long-term	Short-term	Long-term	Short-term
1953		1				
1954						
1955	8					
1956	10	4				
1957	8	1				
1958	8	2				
1959	6	2				
1960	12	4				
1961	11	1				
1962	6					
1963	13		3			
1964	16	1	2	2		
1965	7	1	2			
1966	10		3			
1967	5	4	1			
1968	15	2	3	1		
1969	15		20	34		
1970	5	3	4			
1971	12	2			5	19
1972	1	2	1	2		
1973	2		3			
1974	3					
1975	2					
Total	175	30	42	39	5	19

*Long-term = at least one academic year.

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PERCENTAGE OF RETURNED EDUCATION PARTICIPANTS
(1953-1975) WORKING IN EDUCATION 1/

U.S.		Third Country		India/Pakistan	
Long-term	Short-term	Long-term	Short-term	Long-term	Short-term
87%	80%	79%	97%	80%	42%

NOTE: Complete figures for Nepalese provided training and scholarships (1953-1975) in education in other donor countries are not available, but these figures for academic years 1962-63 through 1964-65 may be taken as at least somewhat representative: India, 180 students; U.S.A., 44; United Kingdom, 27; U.S.S.R., 10; China, 1; Other, 35. (Source: USAID/Nepal documents and HMG, "The Third Plan (1965-70)," Kathmandu: National Planning Council, Ministry of Economic Planning, 1971)".

1/ In addition to U.S.-trained participants working in education in Nepal, it is important to note the role Peace Corps has played and continues to play in the education sector. From 1962-1975 approximately 700 Peace Corps Volunteers worked in education in Nepal, mostly as classroom teachers helping to reduce somewhat the severe shortage of trained vocational, mathematics, science, and English teachers. Some of these volunteers were also involved in teacher training and curriculum development, including AID/Nepal-funded development of improved science and mathematics curricula which were eventually incorporated into the NESP textbooks. The Peace Corps continues to provide 20-30 volunteers each year, for 2 year tours of duty, to teach in remote districts where there is a continuing shortage of trained teachers and to work in teacher training projects.

APPENDIX F

SOME KEY U.S. TRAINED EDUCATIONISTS

Name	Position	Where Trained	When Trained
Aryal, Mr. Krishna Raj	Ambassador to France (former Minister of Education)	University of Oregon (UO)	1955-56
Sainju, Dr. Mohan Man	Member, National Planning Commission (former Rector of Tribhuwan University)	University of North Carolina	1970-72
Shrestha, Mr. Ishwari Lall	Joint Secretary, MOE, Administrative Management Department	Not Available	1957-58
Sakya, Mr. Thakur M.	Education Advisor, UNESCO, Bangkok (former Joint Secretary, MOE)	Not Available	1964-65
Uprety, Dr. Trailokya N.	Assistant Director, UNESCO, Bangkok (former Vice Chancellor, Tribhuwan University)	UO	1955-56 1959-62
Rajbhandari, Mr. Pradumra L.	Retired (former Secretary of Education)	Not Available	1960-61
Koirala, Mr. Dirgha Raj	Retired (former Secretary of Education)	Not Available	1958-60
Singh, Mr. Manamohan Lal Singh	Executive Chairman and General Manager, National Trading Ltd. (former Director General of Education)	Not Available	1963-64
Singh, Mr. Ram Chandra Bahadur	Rector, Tribhuwan University	UO	1959-60

Name	Position	Where Trained	When Trained
Shrestha, Mr. Baikuntha Lall	Chief Administrator, Janek Education Materials Centre (JEMC)	University of Oklahoma Southern Illinois University (SIU)	1960-61 1968-70
Shrestha, Dr. Kedar Nath	Dean, Institute of Education, Tribhuwan University	SIU	1964-65 1968-70
Kasaju, Dr. Prem K.	Chief, CERID	SIU	1966-67 1970-74
Sharma, Mr. Gopi Nath	Director, MOE, Western Regional Education Directorate	UO	1955-56
Basnett, Mr. Neer Mardan	Director, MOE, Eastern Regional Education Directorate	UO	1960-61
Thapa, Mr. Rana Bahadur	Director, MOE, Central Regional Education Directorate	UO	1957-58
Kiran, Mrs. Chandra Kala	Director, MOE, Curriculum, Textbook and Supervisor Development Centre	UO	1955-56 1971-72
Rana, Dr. Ratna S.J.B.	Member, NPC	University of Hawaii	N/A
Basnyat, Mr. Narendra B.	Dean, Institute of Agriculture and Animal Sciences, Tribhuwan University	Not Available	1955-56

Name	Position	Where Trained	When Trained
Khanal, Mr. Yadu Nath	Ambassador to China (educationist and former Ambassador to U.S.)	Not Available	1956-57
Dangol, Mr. Hari B.	Head, Press Division, JEMC	SIU	1961-64 1969-70
Mishra, Mrs. Shanti	Head Librarian, Tribhuwan University	SIU	1962-63
Pant, Mr. Krishna P.	Under Secretary, MOE, Administrative Management Department	Claremont Graduate School	1966-67
Joshi, Mr. Subarna Man	Under Secretary, MOE, Secondary Education Division	Not Available	1967-69
Shrestha, Dr. Madan Man	Campus Chief, IOE, Tribhuwan University, Birgunj	University of Pennsylvania	1974-77

APPENDIX G

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APPENDIX H

PHOTOGRAPHS

THIS REPORT IS DEDICATED TO THE STUDENTS AND TEACHERS OF NEPAL, WHO FACE MANY OBSTACLES IN THE QUEST FOR EDUCATION

Students at rest on the trail to school. The vast majority of Nepalese, rural and urban, put a very high value on education. Students often walk 2-3 hours each day to and from school, and parents often sacrifice meager resources to pay for books, tuition (at secondary levels), and school clothing.

Storeroom at Meshram Baraha High School. Ghandruk, Kaski District, with the school's entire stock of science equipment and supplies. As can be seen, students often have to study science with little or no lab equipment.

Primary students in a dark and very crowded classroom in Simal Chour, Kaski District.

Classroom furnishings in most schools are spartan by U.S. standards. Here a Peace Corps Volunteer teaches math to a group of sixth class students at the model Lahachowk Lower Secondary School, Lahachowk, Kaski District, near Pokhara.

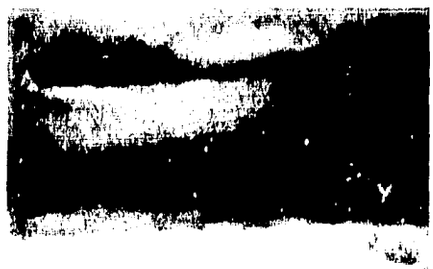
This lower secondary school in Hile, Dhankuta District, in the eastern hills is in a state of disrepair not uncommon for many schools in Nepal. Annual budgets rarely include funds for routine maintenance.

Crowded, dank and dark classrooms encourage students and teachers to seek the comfort of outdoor study. This photo was taken on the grounds of the Jalapa Devi Secondary School, Dakrabas, in the eastern hills.

Although rather cramped for space, these sixth class students at Tribhuwan Trisuli High School do enjoy a modestly furnished room with a few visual aids.

Tribhuwan Trisuli High School, Trisuli Bazaar, Nawakot District, in the hills three hours by road from Kathmandu. School buildings tend to be more elaborate when located in bazaar areas where there has traditionally been considerable local financial support.

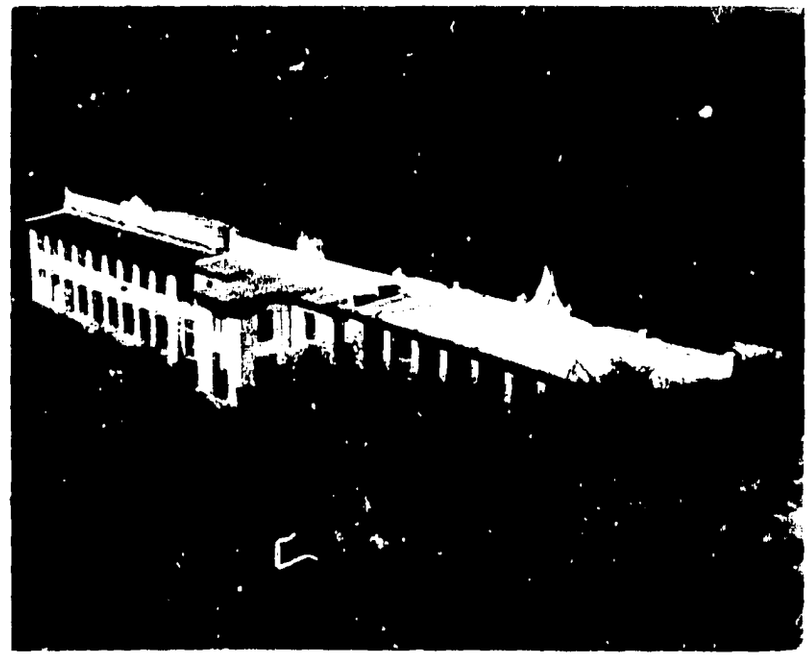
There remains a strong social attitude in many rural parts of Nepal toward keeping girls at home, but this attitude no longer prevails in bazaar towns and is gradually breaking down in more rural areas as well.

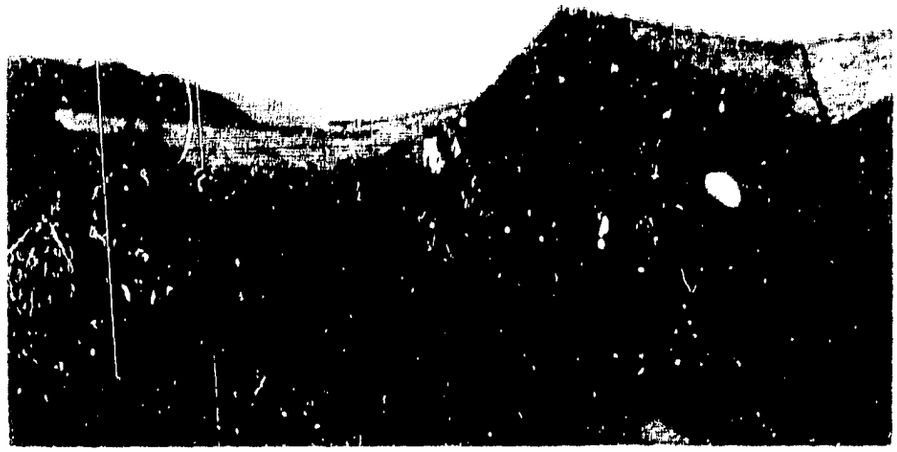


Girl students, better dressed than those in more remote areas, gather at a roadside rest stop under a "peepal" tree that gives shade to weary trekkers. In 1951 the percentage of female students enrolled was less than one percent. By 1979 this figure had increased to 23.5 percent at the primary, 18.4 percent at the lower secondary, and 16.5 percent at the upper secondary level.

Peter Sellar, Ram Chandra Shrestha, and their porters rest below the Annapurna Range during a 6-day trek in the hills of west central Nepal, visiting schools and interviewing people about the impact of education on thier lives.

The original building on the Dhankuta Multipurpose Campus, Dhankuta. This campus also has an IOE branch. Dhankuta is the headquarters for the eastern Development Region, one of four such centers in the country.





This District Education Office, Kaski District, Pokhara, was built with USAID funds as a model facility.

The District Education Office for Sunsari District, Inerwah, in the eastern Terai (plains) region. All district centers and most schools in the Terai are accessible by road so student travel supply of books, etc. is much easier here than in the hills.

Prithivi Narayan Campus, Pokhara, on which is located a branch of the Institute of Education, originally started with USAID support.

TABLES

CHANGES IN NUMBER OF SCHOOLS, STUDENTS, TEACHERS 1951-79

NUMBER OF SCHOOLS

	1951	1961	1970	1975	1979
Primary	321	4,001	7,256	8,708	9,404
Lower Secondary	*	*N	*	2,289	2,639
Secondary (thru 1970), Upper Secondary (from 1971)	11	156	1,065	520	593

NUMBER OF STUDENTS

	1951	1961	1970	1975	1979
Primary	8,505	192,533	408,471	601,335	875,494
Lower Secondary	*	*	*	160,258	278,580
Secondary (thru 1970), Upper Secondary (from 1971)	1,680	21,115	129,537	91,325	93,651

STUDENT ENROLLMENT RATIO

	1951	1961	1970	1975	1979
Primary	0.9	15.8	32	59	77
Lower Secondary	*	*	*	14	26
Secondary (thru 1970), Upper Secondary (from 1971)	0.15	0.2	5.2	10	19

FEMALE ENROLLMENT RATIO

	1951	1961	1970	1975	1979
Primary	< 1	NA	15.9	17.3	23.5
Lower Secondary	*	*	*	10.3	18.4
Secondary (thru 1970), Upper Secondary (from 1971)	NA	NA	14.3	17.3	16.5

NUMBER OF TEACHERS

(When available, number of trained teachers in parenthesis)

	1951	1961	1970	1975	1979
Primary	640	NA	18,674 (4,983)	17,728 (7,287)	24,652 (9,605)
Lower Secondary	*	*	*	6,082 (2,061)	9,416 (3,845)
Secondary (thru 1970), Upper Secondary (from 1971)	120	NA	5,628 (981)	3,422 (1,170)	3,947 (2,425)

STUDENT/TEACHER RATIO

	1951	1961	1970	1975	1979
Primary	13:1	NA	22:1	23:1	36:1
Lower Secondary	*	*	*	26:1	29:1
Secondary (thru 1970), Upper Secondary (from 1971)	14:1	NA	21:1	19:1	24:1

* Thru 1970 grades were divided into Primary (1-5) and Secondary (6-10) levels only. Beginning in 1971 with the New Education System Plan (NESP) grades were divided into Primary (1-3), Lower Secondary (4-7), and Upper Secondary (8-10) levels.
Source: HMG, Ministry of Education (MOE)

Table 2

AID AND GON EXPENDITURES FOR EDUCATION
1958-1975[1] (In $ Million)

	1958-1962	1963-1967	1968-1972	1973-1975
US AID Disbursements In Education Sector	.42	8.86	5.85	1.24
GON Education Budget Expenditures	3.39	13.41	21.65	34.03
US AID Disbursements in Education as % of GON Education Budget Expenditures	12%	66%	27%	4%

NOTE: During this 1958-75 period USAID was by far the largest donor in the education sector. India was the only other donor, assisting at the levels indicated below (in $ Million):[2]

Up to 1961	1961-1962	1962-1963	1963-1964	1964-1965[3]
1.2	.024	.007	.004	.011

1/ 1954-1958 figures not available.
2/ Source: Extrapolated from HMG, Educational Statistical Report, 1965-66, Kathmandu: Ministry of Education: Planning, Statistics and Research Division, May, 1967, Appendix B, p. 119.
3/ Figures from 1965 onward not available.

Table 1

U.S. AID TO EDUCATION BY SUB-SECTOR
1954-1975[1/]

Teacher and Technical Education	$ 6,836,293
Primary Education	3,056,248[2/]
Higher Education	2,036,946
Teacher Education	1,452,762
Education Development	1,373,295
Education Materials	1,312,678
Teacher and Materials Utilization and Development	1,231,481
Secondary Education and Multipurpose Education	632,754
Vocational Education	280,043
Education Administration	248,478
Adult Education	229,650
Library Development	94,825
Science Education Center and Science Teaching Enrichment Program (STEP)	23,309
TOTAL	$18,808,762

1/ Does not include agriculture education projects. Figures extrapolated from "A Quarter Century of American Assistance to the Development of Nepal", United States Information Service (USIS), Kathmandu, January, 1976.

2/ Does not include all funds spent on primary teacher training, primary curriculum development, materials utilization, etc. since these were figured into other sub-sector categories.

U.S. AID TO EDUCATION BY PROJECT
(DISBURSEMENTS)
1954-1975[1/]

Project Name	Project Number	Fiscal Years	$	India/Pakistani Rupees $ Equivalent	TOTAL
Educational Activities	67-67-907	1954-1958	205,000	34,000	239,000
Teacher Training and Related Activities	67-66-908	1954-1958	220,000	732,000	952,000
Education Development	367-67-018	1958-1960	130,000	-	130,000
Education and Training	367-67-018	1961-1963			
Primary Education	N-64-AA		31,000	-	31,000
Secondary Education	N-65-AB		121,000	-	121,000
Teacher Training/Higher Education	N-66-AC		53,000	-	53,000
Adult Education	N-67-AD		5,000	-	5,000
Education Materials Development	N-69-AE		94,000	-	94,000
Library Development	N-69-AR		91,000	-	91,000
Primary Education	11-640-059	1964-1965	33,000	658,000	691,000
Secondary Education	11-650-060	1964-1965	163,000	707,000	870,000
Teacher Training/Higher Education	11-660-061	1964-1965	26,000	615,000	641,000
Adult Education	11-670-062	1964-1966	26,000	137,000	163,000
Education Materials Development	11-690-063	1964-1967	312,000	1,755,000	2,067,000
Primary and Teacher Training	11-640-093	1966-1967	108,000	2,783,000	2,891,000
Technical Education	11-650-060	1956-1967	174,000	985,000	1,159,000
Teacher and Technical Education[2/]	11-650-060	1968-1972	2,873,000	4,505,000	7,378,000
Teachers and Materials Utilization and Development	11-690-228	1973-1975	1,007,000	226,000	1,233,000
		TOTAL	5,672,000	13,137,000	18,809,000

1/ Does not include agriculture education projects, i.e., (1) Institute of Agriculture and Animal Sciences and (2) Agriculture Education. Figures in this table taken from E-1, ABS, U-203, and U-204 documents.

2/ From FY 68 to FY 72 all education projects became sub-projects under this "Teacher and Technical Education Project." This omnibus project included teacher education, teacher salary subsidies, curriculum and testing materials development, secondary and multipurpose (vocational) education, and science education.

Table 4

No. 10: Tunisia: Core Water Projects (October 1980)
No. 11: Jamaica Feeder Roads: An Evaluation (November 1980)
No. 12: Korean Irrigation (December 1980)
No. 13: Rural Roads in Thailand (December 1980) PN-AAH-970
No. 14: Central America: Small Farmer Cropping Systems (December 1980) PN-AAH-977
No. 15: The Philippines: Rural Electrification (December 1980) PN-AAH-976
No. 16: Bolivia: Rural Electrification (December 1980) PN-AAH-978
No. 17: Honduras Rural Roads: Old Directions and New (January 1981) PN-AAH-971
No. 18: Philippines Rural Roads I and II (March 1981) PN-AAH-973
No. 19: U.S. Aid to Education in Nepal: A 20-Year Beginning (May 1981) PN-AAJ-168

SPECIAL STUDIES

No. 1: The Socio-Economic Context of Fuelwood Use in Small Rural Communities (August 1980) PN-AAH-747
No. 2: Water Supply and Diarrhea: Guatemala Revisited (August 1980) PN-AAJ-007
No. 3: Rural Water Projects in Tanzania: Technical, Social, and Administrative Issues (November 1980) PN-AAH-974

PROGRAM DESIGN AND EVALUATION METHODS

Manager's Guide to Data Collection (November 1979) PN-AAH-434

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